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AUTHOR Stephens, E. Robert
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ABSTRACT

This paper examines trends that are currently reshaping rural America and rural education. It reviews the debate about how best to improve rural school districts, suggesting that what is needed is a better understanding of the changing context in which this country's public school enterprise is taking place. The paper begins by reviewing the work on several recent typologies of nonmetropolitan America which establish the nature of diversity there. This is followed by consideration of the equally important concept that rural schools differ among themselves, as indicated by early results of promising research. In the third section, a synthesis is provided of the major economic, social and political developments impacting rural America that appear to have the most significance for school improvement programs. Next, the paper provides a synthesis of the "first round" of education reform and a review of what is being suggested as the most meaningful direction for the next generation of reform. The emphasis in both instances, however, is on the seldom considered consequences of reform on small, rural school districts; these educational developments represent potentially significant changes in the environment in which rural systems function. The paper concludes with a discussion of potential policy implications of the economic, social, political, and educational trends for rural school improvement efforts. The focus here is on displaying the major dimensions of the changing context in which rural school improvement must take place. It is suggested that long-term rural school improvement should be specific to each state in recognition of the existing policies, traditions, and diversity of state systems. This document contains 123 references, 23 demographic tables, and 6 figures. An appendix contains an additional 8 maps. (TES)

THE CHANGING CONTEXT OF EDUCATION IN A RURAL SETTING

Occasional Paper 26

Prepared by
E. Robert Stephens, Professor

Department of Education Policy, Planning, and Administration
College of Education, University of Maryland, College Park

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INTRODUCTION

Rural America is vastly different today than it was as recently as a quarter of a century ago when many current members of the education policy and school improvement communities first began their professional careers. It has a different set of problems and faces a number of issues unlike any recent period in American history. These new developments are of profound significance for those who seek to shape public policy for rural education and for those organizations having a mission to improve the quality of education for the children and youth attending rural elementary and secondary schools.

The primary objective of this paper is a modest one. The intent is to establish the nature of the trends that are reshaping rural America and, it follows, will change education in a rural setting, perhaps in irreversible ways. Rural, small districts continue to be an important component of the public school enterprise in the United States. They are to be found in significant numbers in virtually all states. Depending on how one defines them, they represent approximately two-thirds of the public school systems in the nation and are responsible for the education of from one-fourth to one-third of the public elementary/secondary school-age population. The critical need at this point in the debate about how best to improve rural districts is a better understanding of the changing context in which this enterprise is taking place.

As recently as two years ago, it appeared that the unfolding set of circumstances facing rural schools posed the gravest threat to the quality of rural education in over 30 years (Stephens, 1987a). Yet, this threat continues to increase as even more recent data on the changing context of rural America have been compiled and published that seem to confirm trends first experienced in the early part of this decade.

The plan of the paper is to first establish the nature of the diversity of rural America as important background for the discussion that follows. This will be done by reviewing the recent work on several typologies of nonmetropolitan America that hold promise for dispelling forever the widely held myth about the homogeneity of rural America (Section One). This is followed by consideration of the equally important concept that rural schools also differ, as some of the promising beginning work on rural school typology building has established (Section Two). Next, a synthesis is provided of the major economic, social, and political developments impacting rural America that appear to have the most significance for education policy and school improvement efforts (Section Three). Extensive use will be made here of some of the latest of the long history of exemplary work of the Economic Research Service, United States Department of Agriculture (ERS/USDA), that has over the years proven to be such a tremendous national resource. Following this, yet another synthesis of the popularly labelled "first round" of education reform, as well as a review of what is being suggested as the most meaningful direction for the next generation of reform, is provided (Section Four). The emphasis in both instances, however, is on the seldom considered consequences of the reform movement on rural, small school districts. These developments in education represent still another potentially significant change in the environment in which rural systems function that must also be recognized as part of the changing context of education in a rural setting.

The paper concludes with a discussion of a number of potential policy implications of the economic, social, political, and educational trends for rural

school improvement efforts (Section Five). The focus here is on drawing out, displaying, and setting forth the major dimensions of the changing context of the environment in which rural school improvement must take place is consistent with the limited objective of the monograph. Moreover, requisite long-term rural school enhancement activities must ultimately be largely state specific in recognition of the existing policies and practices, traditions, and diversity of state systems of elementary/secondary education.

SECTION ONE: THE DIVERSITY OF RURAL AMERICA

It is common in many quarters to view regions of the United States as either metropolitan (metro) or nonmetropolitan (nonmetro) and to equate these with urban and rural. Further, many government reports make use of the United States Office of Management and Budget's (OMB) standard metropolitan statistical area (SMSA) designation to report basic geographic districts and population counts and to describe other social and economic characteristics of the nation. OMB currently defines a SMSA (or the equivalent New England county metropolitan area, NECMA) as consisting of:

> ...A single county area or a group of contiguous counties that includes at least one "central city" of 50,000 inhabitants or in some instances contiguous twin cities that together meet this population minimum (Department of Commerce, 1983, p. XVIII).

The United States Census Bureau reports that there were 146 SMSAs and NECMAs in 1982 that consisted of a single county. The remaining 159 each consist of two or more counties. Thirty-five cross state boundaries (p. XVIII).

The number and percent of the five types of local governments, including school districts, located inside and outside a SMSA in 1982 are shown in Table 1. In 1980, slightly more than 75 percent of the total United States population of 226.5 million resided in an SMSA or NECMA (p. XVIII). The location of metropolitan and nonmetropolitan counties is provided in Figure 1.

The widespread application of the metropolitan (urban) and nonmetropolitan (rural) dichotomy may be useful, indeed necessary, for many purposes. However, its popular usage has also tended to mask, perhaps unwittingly, the enormous observable differences in nonmetropolitan (rural) regions of the nation.

In a recent paper, Kenneth L. Deavers (1987), director of the Agriculture and Rural Economy Division of the ERS/USDA, succinctly stated the case against the continued indiscriminate use of the urban-rural dichotomy:

> For years, the urban-rural dichotomy was a typology that had enormous power, delineating the key dimensions and content of rural policy. Describing a place as rural was a shorthand way of saying many things.... Over time, however, changing rural conditions have made the rural-urban dichotomy significantly less useful. The process of economic development and accompanying social change, made possible in part by major improvements in technology—especially in transportation and communications—has tended to reduce many of the once important differences between rural and urban areas (p. 84).

Deavers is not, however, suggesting that the two are now homogenous. Moreover, much of the work of Deavers and his colleagues at the ERS/USDA cited in this piece has been aimed at more clearly establishing the pronounced differences existing in nonmetropolitan regions.

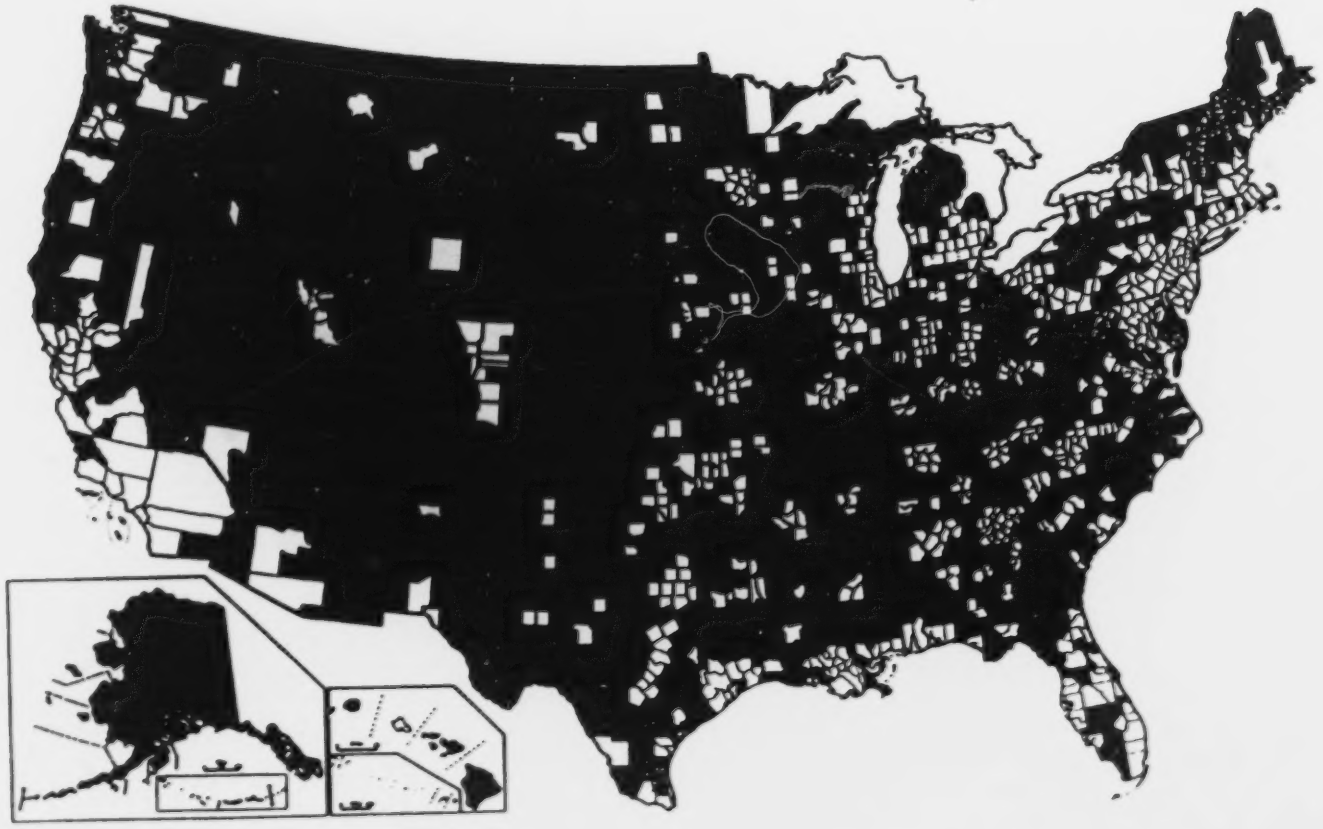
It is no longer useful to view rural America as the opposite of urban America. How then does one account for the many observable differences in nonmetropolitan regions? Are there typologies available to help identify and order data that appear to account for the complexities of the external environment under which rural communities and regions function? One of the central considerations in taxonomic efforts is to help understand these and

Table 1

Local Governments' Inside and Outside Standard Metropolitan Statistical Areas, 1982

	Total	Inside SMSA/NECMA	Outside SMSA/NECMA	Percent Outside SMSA and NECMA
County	3,041	670	2,371	78.0
Municipal	19,076	7,018	12,058	63.2
Township	16,734	4,756	11,978	71.6
School District	14,851	5,692	9,158	61.7
Special District	28,588	11,725	16,863	59.0
United States	82,290	29,861	52,429	63.7

Source:
Department of Commerce. (1983). 1982 Census of governments (Table P, p. xix). Volume 1. Washington, DC: Bureau of the Census, Superintendent of Documents, Government Printing Office.



Source:
Cooperative Extension Service. (1986). Revitalizing rural America (p. 14). Washington, DC: Department of Agriculture.

Figure 1

Metropolitan and Nonmetropolitan Counties

other phenomena.

Two typologies developed by the ERS/USDA are of tremendous aid in better understanding the observable diversity of nonmetro regions and will be reviewed here. The first provides a meaningful way to differentiate the diversity in the size of population of nonmetropolitan counties and their orientation to large urban centers. The second makes use of the primary economic activity of nonmetropolitan counties as a useful way to distinguish rural areas.

Population Size and Urban Orientation

A recent report of the ERS (McGranahan, Hession, Hives, and Jordon, 1986) examined population trends for the decade 1970-80. In this report, a county classification system differentiated metro counties according to size of the metro area. Further, the classification system distinguished nonmetropolitan counties on the basis of both the size of their urban population and their adjacency to metro areas.

Metro counties were differentiated according to the population size of the metro area of which they were all a part. Three population size categories were used: large (over 1,000,000), medium (250,000-999,999), and small (under 250,000). Nonmetro counties, defined as those not forming all or part of a metro area, were divided into three basic categories of size of population: urbanized (20,000 or more urban residents), less urbanized (2,500-19,999 urban residents), and rural (no urban residents). Each nonmetro county was divided further into those adjacent to metro areas and those located away from metro areas (p. 2). The complete county classification system used in the 1986 report is presented in Table 2.

The authors of the report caution that:

> Although urban size and adjacency are combined into an overall scale of urban influence, they represent different influences and are not necessarily related to population characteristics in the same way. For instance, larger places tend to be service centers for people and businesses in nearby small towns and open areas. Greater urban influence as represented by size of urban population results in a larger proportion of the work force in service industries. On the other hand, urban influence as represented by adjacency to a metro area results in a small service-sector work force, as people and businesses in adjacent counties tend to use metro area services (p. 2).

Nonetheless, the county classification system used in this exercise is an especially useful tool in helping to establish important aspects of the existing diversity in nonmetropolitan (rural) America. For example, it should be clear that the degree of isolation from the service areas of large urban centers is an important variable that must be considered in the formulation of public policy for rural education and by those organizations having a mission to provide assistance to isolated rural school districts. This, and other implications, will be discussed further in a later section of the paper.

Primary Economic Activity of Rural Counties

The second typology developed by the ERS reviewed here focuses on the primary economic activity of nonmetropolitan counties. In this effort, the authors (Bender, et al., 1985) acknowledge that "in the aggregate, nonmetropolitan (nonmetro) areas have become much more similar to metropolitan (metro) areas, yet far more diverse among themselves" and further assure that "...the diversity among nonmetro areas has been enhanced, not reduced by the sustained period of economic and social changes in rural America since World War II" (p. 1).

For the 48 contiguous states, the report identifies seven groups of nonmetro counties and a set of counties that are unclassified. The seven classified groups and the number in each category are established below (see the Appendix

Table 2
Classification of Counties by Metropolitan Status and Urban Orientation, 1970

Metropolitan (647 counties)*	Nonmetropolitan (2,490 counties)
1. Large metropolitan (186 counties) - Counties part of standard metropolitan statistical areas (SMSAs) with at least one million population in 1970. Examples are New York City, Chicago, and Los Angeles. a. Core (49 counties) - Counties containing the primary central city of large SMSAs. Examples are Cook County, Illinois, and the five counties of New York City. b. Fringe (137 counties) - Other (suburban) counties of large SMSAs. Examples are Lake County, Illinois, part of the Chicago SMSA, and Westchester County, part of the New York SMSA.	4. Urbanized adjacent (173 counties) - Counties with an urban population of at least 20,000 which are adjacent to a metropolitan county, where adjacency is defined as both touching a SMSA at more than a single point and having at least one percent of the labor force commute to the central county of the SMSA for work.
2. Medium metropolitan (269 counties) - Counties of SMSAs with 250,000 to 999,999 population. Examples of SMSAs in this category include Phoenix, Oklahoma City, Madison, Birmingham, and Salt Lake City.	5. Urbanized nonadjacent (154 counties) - Counties with an urban population of at least 20,000 which are not adjacent by the above definition.
3. Small metropolitan (192 counties) - Counties comprising SMSAs with under 250,000 population. Examples of SMSAs in this category include Portland, Maine; Eugene, Oregon; and Hamilton-Middletown, Ohio.	6. Less urbanized adjacent (565 counties) - Counties with an urban population of 2,500 to 19,999 and adjacent by definition given in (4) above.
	7. Less urbanized nonadjacent (734 counties) - Counties with an urban population of 2,500 to 19,999 and not adjacent by definition given in (4) above.
	8. Rural adjacent (241 counties) - Counties with no places of 2,500 or more population and adjacent by definition given in (4) above.
	9. Rural nonadjacent (623 counties) - Counties with no places of 2,500 or more population and not adjacent by definition given in (4) above.

*Based on definition for 1970 given in the Office of Management and Budget's (OMB) Standard Metropolitan Statistical Areas, Revised Edition, 1975, excluding Kankakee County, Illinois, and Benton and Washington Counties in Arkansas, which were designated metropolitan by OMB due to post-1970 annexation or population gains.

Source:
McGranahan, D. A., Hession, J. C., Hines, F. K., & Jordon, M. F. (1986). Social and economic characteristics of the population in metro and nonmetropolitan counties, 1970-80 (p. 3). Rural Development Research Report No. 58. Washington, DC: Department of Agriculture, Economic Research Service.

for outline maps showing locations of the groups).

1. Farming-dependent counties - Farming contributed a weighted annual average of 20 percent or more of total labor and proprietor income over the five years from 1975 to 1979. (702)
2. Manufacturing-dependent counties - Manufacturing contributed 30 percent or more of total labor and proprietor income in 1979. (678)
3. Mining-dependent counties - Mining contributed 20 percent or more to total labor and proprietor income in 1979. (200)
4. Specialized government counties - Government activities contributed 25 percent or more to total labor and proprietor income in 1979. (315)
5. Persistent poverty counties - Per capita family income in the county was in the lowest quintile in each of the years 1950, 1959, 1969, and 1979. (242)
6. Federal lands counties - Federal land was 33 percent or more of the land area in a county in 1977. (247)
7. Destination retirement counties - For the 1970-80 period, net immigration rates of people aged 60 and over were 15 percent or more of the expected 1980 population aged 60 and over (515) (p. 2)

The seven county groups include all but 370 (the unclassified) of the 2,443 nonmetro counties using the 1974 Office of Management and Budget designations. The groups are not mutually exclusive, but the ERS/USDA's position is that the overlaps are not considered serious: 57.3 percent belong exclusively to one group; 22.0 percent are in two; only 6.0 percent in three or more (p. 2).

The overall conclusion of the ERS/USDA is that the aggregate changes in nonmetro areas:

> ...appear to make nonmetro conditions similar to those in metro places, and the industrial changes in rural America are often characterized as a process of diversification toward a metro norm. However, this characterization is somewhat misleading. Another conclusion is more nearly correct for individual rural areas; that is, nonmetro areas are becoming more diverse as each of them continues to specialize in different activities (p. 2).

The typology being advanced by the ERS/USDA is not without criticism (Luloff, 1987; Pickard, 1988). Nonetheless, this represents substantial progress in our thinking about rural America and is a valuable tool in helping to achieve several needed breakthroughs in the formulation of public policy for rural education. On the one hand, it should help to further establish the dysfunctionism of the traditional urban-rural dichotomy. Moreover, it should also help dismiss, forever, it is hoped, the myth that rural is synonymous with agricultural or with any other single extraction industry.

Summary

Substantial progress is being made in the development of meaningful typologies that better reflect the diversity of nonmetropolitan America. The work of the ERS/USDA cited here gives prominence to the important considerations of the size of population of nonmetro areas, their proximity to differing metro population size areas, and the primary economic activity of the nonmetro areas. The use of these three critical characteristics demonstrates that nonmetro regions are as diverse from each other as are nonmetro regions in the aggregate from metro regions. Moreover, the diversity among rural areas is more pronounced today than at any point in the post-World War II period. Finally, the promising work of the ERS in constructing typologies of rural America has important implications for both the policy and school improvement communities for the design of rural school district improvement initiatives.

SECTION TWO: THE DIVERSITY AMONG RURAL, SMALL SCHOOL DISTRICTS

Much has been written about the observable differences between urban and rural school districts, as well as the special problems of rural schools. Not nearly as widely recognized, however, are differences among rural, small school districts. Jonathan Sher (1977), one of the most insightful of the contemporary advocates of rural education, observed:

> The point is that rural America is far too heterogeneous and complex to be amenable to simplistic definitions or comfortable stereotypes...like rural America as a whole, rural schools and school districts are distinguished by their diversity. Despite increasing standardization, rural schools still tend to reflect the pluralism found among the rural communities they serve...as a consequence, treating rural schools and school districts as if they were a unified, monolithic entity would be a serious mistake (p. 1).

Sher's 1977 caution reinforces those of earlier observers who also warned against lumping all rural districts into one universal category but whose concerns were largely ignored or forgotten in the ensuing years (Butterworth and Dawson, 1952; Commission on Schools in Small Communities, 1939; Department of Rural Education, 1957).

Four recent efforts to construct a typology of rural, small school districts have been undertaken in recent years and will be reviewed here. The first two had as their primary objective the shaping of school improvement initiatives that would acknowledge the distinguishing differences among rural schools and the communities they serve. Implications of these typologies for school improvement efforts will be discussed later in this paper. What follows is a summary of all four proposals of the best way to view the diversity among rural systems.

The Gjelten Typology

In remarks prepared for a United States Department of Education sponsored activity, Tom Gjelten (1982), based on his work with the National Rural Center, stated that "...despite their homogeneity, very small districts in this country are as different from each other as they are from suburban or urban school systems" (p. 12). The typology he proposed to best understand differences in rural systems makes use of socioeconomic, cultural, and demographic characteristics.

Gjelten's typology consists of five types of rural districts:

Stable. This is the closest to the "classic" idea of rural—white, homogeneous, agricultural, mostly in the West and middle West. They have relatively few problems, and the best education in rural schools tends to be in these stable communities. They always have been willing and able to pay for good programs, but fiscal reforms have caused some problems, as have enrollment declines. Also, their economic base is changing. Reorganization (consolidation) remains an option for many of these stable districts.

Depressed. These have an underdeveloped economy, marginal sources of income, a moderate to high minority enrollment and an out-migration. There are fewer "in-kind" resources, as well, such as parent volunteers. The overriding question for these schools is whether they should aim at revitalizing the economy or help individual students move on. Generally, they have fewer opportunities to offer quality programs.

High growth. These schools have new opportunities, both in dollar resources and in people. The issues for schools in these areas have more to do with planning and management, because it is difficult to forecast their needs.

Reborn. These are in scenic or otherwise new recreation areas, with high rates of in-migration and new "energies"; people are going there by choice. But they also are experiencing conflicts between the natives and the newcomers over values, student futures, and cultural and social changes.

Isolated. These are so unique they deserve a special category. Because of enrollment-based formulas, they lack funding, and their isolation now is more profound than in the past "because there is so much more to be isolated from." It is very difficult to teach about the outside world because students have such little contact with it (pp. 12-13).

The Nachtigal Typology

In the same year, Paul Nachtigal (1982) edited what is widely acknowledged as one of the finest books on the condition of rural education to be published in recent times. In a concluding chapter, Nachtigal developed what he called a tentative typology of rural communities. The three classes of rural communities in the Nachtigal system are shown in Table 3, along with the dominant value structure, the prominent socioeconomic factors, and the significant political structure of each.

Nachtigal's discussion of each of the three categories of rural communities and the illustrations he cites are particularly useful in calling attention to the pronounced differences and problems of schools serving rural communities. According to Nachtigal:

> The first category of rural America, the Rural Poor...by almost any measure of the good life is well below the national average: lower median income, lower level of educational development, higher mortality rate, and lower level of political power and therefore self-determination.... Appalachian coal towns and delta communities of the lower Mississippi are examples of these social/ economic/political conditions (pp. 273-274).

As is suggested in its title, the second category—Traditional Middle America—includes many midwestern agriculture-based communities.

> Though not wealthy in terms of millionaire status, in comparison to the Rural Poor these communities are well off. Solid family life, well-kept homes, and a puritan work ethic assure a high level of achievement at both school and the workplace. Power structures are relatively open and political participation broad-based. Resources for educational improvement in terms of both money and people are available (p. 274).

Nachtigal's major contribution to typology efforts, however, lies in his use of the third and final category, Communities in Transition:

> Recreation, energy developments, or proximity to urban areas that allows communities to enjoy the rural life have resulted in an influx of outsiders who bring with them different ideas, different value systems, and new demands for services. Here the social structure is in a state of flux, and conflict between the old and the new is almost always focused on the school as it still serves as the hub of the small-town social structure (p. 275).

Nachtigal also offers this observation of particular interest:

> The rich diversity that characterizes rural communities is not so clearly reflected in the rural schools. One hundred years of implementing a

Table 3

Nachtigal's Three Categories of Rural Communities

	Values	Socioeconomic Factors	Politial Structure/ Locus of Control
1. Rural Poor	Traditional/ commonly held	Fairly homogeneous/ low income	Closed, concentrated, often lie outside local community
2. Traditional Middle America	Traditional/ commonly held	Fairly homogeneous/ middle income	More open/widely dispersed
3. Communities in Transition	Wide range represented	Wide range/low to high income	Shifting from "old-timers" to "new-comers"

Source: Adapted from:
Nachtigal, P. M. (1982). Rural America: Multiple realities (Table 16.1, p. 274). In P. Nachtigal (Ed.), Rural education: In search of a better way. Boulder, CO: Westview Press.

common school system policy has resulted in more similarities than differences. The differences, however, are critical, as they have persevered in spite of efforts to provide equal—which has generally been interpreted to mean identical—educational opportunities. The differences have persevered because the linkages between rural schools and communities are still strong enough to offset the pressures of standardization that come from the one best system. Here again the differences are related to economic resources, cultural priorities, commonality of purpose, and political efficacy (pp. 275-276).

The Croft Proposal

A third typology of rural districts is being developed by Don Croft at New Mexico State University. Croft (1986), like Gjelten, also makes use of five categories in classifying typical school systems:

Remedial. Meeting minimum standards. Most students are below grade level in achievement. Classes offered are primarily remedial. Students may be bilingual or need to improve their command of English. May be discipline problems.

Decremental. Declining enrollment and finances. Most students achieving at grade level. However, enrollment and financial assistance are declining. Some consolidation of curriculum occurring, teacher overload, and difficulty in providing comprehensive range of classes.

Incremental. Increasing enrollment and finances. Most students achieving at grade level, and school is typical of a well-operated school. School is ready to broaden class offerings and introduce innovative programs.

Major expansive. Rapidly increasing enrollment. Students achieving at grade level, but school has a great influx of new students. School needs more of the basic curriculum as well as expanded offerings in new areas.

Exemplary. Students achieve well above grade level. District has comprehensive curriculum, but needs state-of-the-art programs to satisfy needs of students and parents. Students primarily attend prestige colleges.

Croft's effort for developing a rural school district typology currently utilizes the independent variables of isolation (distance from SMSA and community population density) and county economic base, and three dependent variables (selected school characteristics, selected teacher attributes, and selected student attributes).

The NWREL Classification of Rural, Poor Schools

The most recent classification effort potentially represents a major breakthrough in rural school typology building. Once completed and perfected, the system being developed by the Northwest Regional Educational Laboratory (NWREL) holds great promise for use in the policy and school improvement communities. The NWREL system developed thus far is being used by the National Rural, Small Schools Task Force of the Council for Educational Development and Research in its report, *End of the Road* (1988).

The focus of the classification system being developed by NWREL is on the identification of "at-risk students" and "at-risk (rural) schools." Their "school poverty" concept will ultimately include four indexes of "poorness": family poverty, low expenditure per pupil, low student outcomes, and limited curriculum offerings (p. 6).

NWREL currently has size, rurality, and family income data on school districts in all 50 states, as well as per pupil expenditures and student performance data on a sample of 17 states. The information on curriculum offerings is in progress (pp. 6-7).

Using data from their 17-state

sample, NWREL projects that for all 50 states:

> Approximately 75 percent of all districts (11,850 of 16,023) are small (defined as having fewer than 2,500 students) or very small (fewer than 1,000); moreover, 59 percent of all districts (9,512) are rural (defined as at least three-fourths of the enrollment living in a town of less than 2,500 population or in an unincorporated place); and 51 percent of all districts are both small and rural (p. 7).
>
> Two thousand two hundred eighty school districts are small, rural and poor; this represents approximately 14 percent of the nation's districts (p. 7).
>
> Another 470 districts are large, rural, and poor districts (these are predominately countywide systems located in many of the southwestern and several of the western states that serve small rural communities) (p. 8).
>
> Approximately 1.3 million students attend small, rural and poor districts and an additional nearly one million attend the larger, countywide rural, poor districts (p. 9).

Not to be minimized is another feature of the NWREL work that should prove to be of great assistance in typology building—the development of an acceptable working definition of a rural, small school. This necessary prerequisite to typology building has been a vexing issue that no doubt has thwarted the efforts of many. While virtually all who have been thinking about definitional issues have argued for the need to include a sparsity of population factor, few have actually tested one or more options. The NWREL effort has provided that much-needed test of the utility of one such measure ("at least three-fourths of the students enrolled live in a town with less than 2,500 population or an unincorporated area," p. 7). The debate concerning the best options to use for the incorporation of a sparsity factor can now benefit from one unprecedented large-scale exercise.

Summary

Substantial progress is being made to address a priority research area established several years ago (Stephens, 1985). A taxonomy of rural schools is critical. A taxonomy would provide answers to the recurring issues that hamper the efforts of the policy communities and others concerned about the quality of schooling in rural America:

> The need for a valid taxonomy of rural schools is uppermost. This step is an important prerequisite for the design of appropriate research that would attempt to compare schools that serve rural populations. To aid this long-term effort, we need to identify the characteristics of the external environments in which rural schools function, their mode of operation, and their products, the three generally accepted central considerations in taxonomic efforts, and, ultimately, to meaningful comparative evaluations (p. 170).

The work of Nachtigal, Gzelten, and Croft gives prominence to the need to reflect socioeconomic factors in the construction of a rural school typology. The exciting NWREL effort represents a giant step toward this end. These classification efforts attempt to recognize the diversity among rural, small school districts, another necessary and critical consideration in the design of rural school improvement efforts.

SECTION THREE: ECONOMIC, SOCIAL, AND POLITICAL DEVELOPMENTS IMPACTING RURAL AMERICA

The central premise of this paper is that significant changes are occurring in rural America that collectively are reshaping the nonmetropolitan regions of the nation and that these patterns must not only be recognized by the policy and school improvement communities, but, in addition, reflected in the formulation of rural school improvement efforts. Failure to do so may result in near irretraceable policy and programming mistakes that are costly or that in other ways fail to serve the still large number of rural Americans. A total of 15 economic, social, and political developments appear to be of most significance and will be reviewed here. These include:

- changes in the world economy,
- the industrial restructuring underway in rural regions,
- the continued high unemployment patterns in rural areas,
- the reduced population growth of nonmetropolitan regions,
- the changing demographics of rural areas,
- the continuance of the rural personal income lag,
- the persistance of poverty in nonmetropolitan regions,
- the persistance of underdeveloped rural human resources,
- the continuing financial crisis in agriculture,
- the growing fiscal pressures on rural local governments,
- the growing gap in the rural infrastructure,
- changes in the federal role in the federal system,
- a weakening political base,
- the lessening of differences in rural and urban social values, and
- changes in family patterns.

A number of the trends cited are no doubt cyclical, whereas others should be viewed as more fundamental and long-term in nature. Moreover, the trends of both types—those that ultimately prove to be cyclical as well as those that are more permanent—are not affecting all rural, nonmetropolitan regions of the nation in the same manner. It is because the patterns have differing consequences for the various regions of nonmetropolitan America that an attempt was made in the preceding section to establish the nature of the diversity to be found in the vast rural areas of this nation.

While there is a substantial consensus regarding associations that exist among many of the 15 trends, a discussion of potential cause and effect relationships is not attempted here. Moreover, no attempt is made to weigh the relative importance of each of the trends. The uneven lengths of the overviews are due in part to the effort to establish the multi-dimensional aspects of a number of the trends.

In addition, not all of the 15 trends cited are peculiar to the nonmetropolitan regions of the nation, but, rather, affect urban areas as well. However, even in instances of this type, the patterns cited have a unique significance for rural regions.

Finally, the overviews of each trend included in this effort to construct a mosaic of the changing context of rural America are only sketches, not comprehensive depictions. That is, the substantial body of literature available on each is, of course, only outlined here.

The work of the ERS/USDA was instrumental in developing the profile that follows. Particularly useful is the work of David L. Brown and Kenneth L. Deavers, associate director and director, respectively, of the Agriculture and Rural Economy Division of the ERS. These authors wrote the opening chapter for the recent massive ERS report to Congress (1987). Brown and

Deavers not only provided a useful framework for the development of the profile presented here, but, in addition, their treatment of a number of the dimensions in their synthesis was particularly insightful and for this reason is quoted extensively.

Beginning at the Beginning: A Changed World Economy

The accelerated interdependence of the economy of the United States with other nations is widely acknowledged. Not so prevalent, however, is awareness of the increasing interdependence of nonmetropolitan America in the world economy, a point to be stressed in several of the overviews that follow. It is appropriate that this synthesis of major economic, social, and political trends impacting rural America begin with a sketch of how the world economy has changed.

A 1986 report of the Cooperative Extension System (CES) begins its discussion of critical forces that are present in a changed world by citing the work of Peter Drucker. The CES report gives prominence to three of Drucker's conclusions regarding the changed world economy:

> The primary goods economy has become "uncoupled" from the industrial economy. This is illustrated in three ways: the collapse of raw material and agriculture commodity prices, that began in 1977, has not greatly affected the world industrial economy; the depressed state of the primary goods economy has not resulted in a depressed state in the industrial economy; and, forest products, metals, minerals, and agricultural producers continue to increase worldwide despite lower prices. The major causes for this uncoupling are the increased production of food in both industrial and developing nations that is outstripping demand and population growth, and the decline in the amounts of raw material used in finished products (p. 7).
>
> Production has become "uncoupled" from employment in the industrial economy; that is, in all industrial nations, manufacturing production has risen while employing fewer people (due to the substitution of knowledge and capital for manual labor, and in the movement from labor-intensive industries to knowledge-intensive industries) (p. 7).
>
> Capital movements rather than trade (in both goods and services) have become the driving force of the world economy (p. 7).

In a recent article on forces impacting the rural economy, Mack Henry, a professor of agricultural economics at Clemson University and a visiting scholar at the Federal Reserve Bank of Kansas City, and two economists at the same Federal Reserve Bank, Mark Drabenstott and Lynn Gibson (1986), cite four factors that have contributed to problems in the rural economy: international factors, the shift to services, deregulation, and changes in agriculture (p. 36). The views of the authors regarding the last three of these changes are included elsewhere in the profile. Their discussion of the changing international scene stresses that United States industries that export or compete against imports, such as the traditional economic activities of agriculture and energy production (oil, gas, coal, and lumber), have been at a competitive disadvantage in world trade in recent years because of a strengthened United States dollar, lower foreign production costs in labor-intensive manufacturing, and increased international energy supplies (pp. 36-37).

They remind us that:

> While the same international forces also have had negative effects on the urban economy, metropolitan areas generally have more diverse economies that buffer some of these effects. Rural economies, on the other hand, normally depend on one principal industry, and none of the traditional

rural industries have fared well in the 1980s (p. 3').

Rogers, Burdge, Korsching, and Donnermeyer (1988) cite still other aspects of the current plight of one of the prominent traditional rural industries, agriculture. They argue that as recently as 1960 only Canada and Argentina competed with other countries in the world grain markets. They cite as evidence what they refer to as the internationalization of agriculture:

> A number of nations in the past decade or two have switched from being net importers to net exporters of agricultural products. Technological innovations like agricultural chemicals and improved crop varieties (especially the high-yielding wheat and rice varieties that set off the "Green Revolution" in many Third World countries in the 1960s) were mainly responsible.
>
> New crop varieties have allowed wheat, corn, and soybeans to be raised under a wide range of different soil, water, and temperature conditions.
>
> Loosening of government restrictions on individual agricultural production in Second World countries like Poland, Yugoslavia, and Russia has boosted production and thus reduced the need for agricultural imports.
>
> Improved transportation and reduced tariff restrictions now allow many more farmers to access the food markets of the world. Not only is the typical farmer linked more closely to urban society, but agricultural commodities are now linked to worldwide markets and trends. The price received by a United States farmer for wheat may be highly dependent upon weather conditions or radioactive fallout in the Ukraine (p. 10).

In an effort to examine the effects of world trends on the economic well-being of the seven major categories of nonmetropolitan counties cited earlier, the ERS (Bender, et al., 1985) first identified six major world trends (world trade interdependence, changes in the age structure of the population, energy scarcity, United States and world business cycles, technological advances and obsolescence, and concern over environmental quality) and then offered a number of hypotheses concerning the effects of these developments on each of the seven county groups. The results of this interesting exercise are reported in Table 4.

In a recent invited essay, Daniel Bell (1988), a professor of social sciences at Harvard University, offered a number of predictions concerning the structural changes that will shape the kind of world people will live in in 2013, a mere quarter of a century from now. Of interest here are his forecasts regarding future developments in the world economy. One of Bell's predictions is that:

> By the year 2013, the Pacific Basin probably will be the center of economic power. If so, the East Asian countries, led by Japan and China, the Southeast Asian nations, and the United States and Soviet Union, will be the major economic players in the world. This is a change of extraordinary historical proportions (p. B3).

Bell's prediction that the 21st century will belong to the Pacific Rim is a theme advanced by many. He bases his prediction in part on what he calls "the demographic time bomb." Unlike others, he regards the demographic time bomb as the "...widening gap between the age cohorts in different parts of the world..." not the explosion of the world population that frequently carries the label. Bell cites a number of examples to illustrate his thesis: in Africa, younger people under 15 years of age account for 40 to 50 percent of the population; in most of Asia, the proportion is between 30 to 40 percent; in the United States, approximately 22 percent; in Europe, except

Table 4

Associations Between the Effects of Major World Trends and Selected County Groups

World Trend	County Group						
	Farming	Manufacturing	Mining	Government	Persistent Poverty	Federal Lands	Destination Retirement
World trade and resource development	*	**	*				
Product demand	**	**					
Age structure	*	*		*	*		**
Energy	*	*	**				
Business cycles	**	**	**		*		*
Technological change	*	**	*		*		*
Environmental quality	*	*	**			**	*

*Hypothesized above-average direct effects.

**Hypothesized major direct effects.

Note: Blanks indicate not applicable.

Source:
McGranahan, D. A., Hession, J. C., Hines, F. K., & Jordon, M. F. (1986). Social and economic characteristics of the population in metro and nonmetropolitan counties, 1970-80 (p. 23). Rural Development Research Report No. 58. Washington, DC: Department of Agriculture, Economic Research Service.

Ireland, it is approximately 20 percent. Bell's position is that:

> These population imbalances mean that, in the next 20 years, we will see demographic tidal waves sweeping the world. In the heavily weighted countries, this will mean more than a doubling of the rates of entry into the labor force (p. B3).

Bell's discussion of the new world division of labor is equally useful in establishing the basic structural changes underway in the world. Bell asserts that the old division of labor (a set of core manufacturing countries plus those that provided raw materials) is now breaking up and no single pattern has yet replaced the old order, although "...basic industrial manufacturing of standardized mass-production products is being 'pulled out' of the western world and located in East Asia and, to a lesser extent, in Brazil and the Mexican-Caribbean region" (p. B3).

Bell attributes these shifts to the following developments:

> In the new manufacturing economy, the proportion of raw material steadily dimensions as a percentage of use and costs. In the advanced countries, the basic change is a move away from heavy, materials-intensive products and processes.... Raw materials diminish in importance, not only because of miniaturization and the reduction of energy requirements, but also because of the revolution in materials science (p. B3).

The Industrial Restructuring Underway in Rural Regions

In addition to changes in the world economy, the industrial restructuring underway in the rural regions of this nation is a fundamental change that is occurring. This shift is also a major precipitating cause for many of the other themes included in this overview.

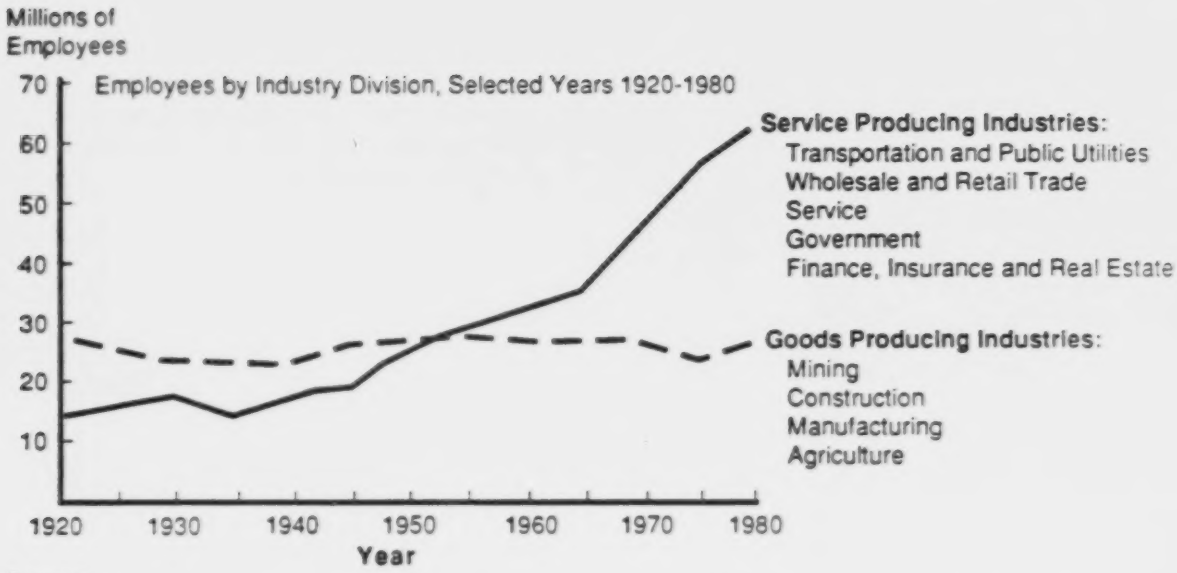
Glen C. Pulver (1986), a professor of agricultural economics at the University of Wisconsin-Madison, using data from the National Commission on Employment Policy, traces the shift that has occurred in total United States goods and service employment from 1920 to 1980. As shown in Figure 2, slightly more than two-thirds of American workers in 1920 were engaged in goods-producing industries, whereas in 1980 more than two-thirds of the workers and self-employed were in service-producing industries. Moreover, throughout the 60-year period, the absolute number employed in the production of goods has remained relatively constant at slightly less than 30 million people. In contrast, the absolute number engaged in the services-producing sector has grown from approximately 14 million to nearly 70 million (p. 3).

Pulver's discussion of the reasons for the reduction in the relative importance of the goods-producing industries follows. He offers two fundamental explanations, the first being:

> ...The increased efficiency in production of goods has released human and other resources for application in other sectors of the economy. The percentage of the United States work force required to meet the need for food, fiber, minerals, construction, and manufactured goods has declined. Farming represents a stark example. In 1920 a large proportion of the people working in the goods-producing sector were engaged in farming. Today, only a small percentage of those working in the sector are thus engaged. This much smaller number of farmers produces enough food and fiber for the entire United States population with large amounts available for export (p. 3).

Pulver's second explanation for the shift from goods-producing to service-producing employment patterns is equally useful:

> There is another major reason that goods production has declined as a job generator in the United States: the change in the world economic



Source:
Pulver, G.C. (1986). *Community economic development strategies* (p. 3). Madison, WI: University of Wisconsin-Madison, Cooperative Extension Service.

Figure 2
Total Goods and Service Employment

> structure. In recent years, manufacturing jobs have been escaping the United States at an increasing rate. As a given industry's manufacturing tasks become more standardized, and its technology ages, its firms begin to seek more favorable climates abroad. For example, more and more textiles, leather products, steel, automobiles, and radios are produced outside of the United States.

Will these past trends hold for the future? Pulver reflects the view of many when he suggests that this country is not likely to regain its former share of the international market regardless of improvements in our productivity (p. 4). He also cites Bureau of Labor Statistics projections concerning sources of future employment growth that hold that 40 industries will generate over three-fourths of the net new job growth between 1984 and 1985. Of the 40, only six (five are in manufacturing and one in construction) are in the goods-producing industries. The remaining high-growth employment areas are in service-producing industries (p. 5), as shown in Table 5.

The focus of this paper, of course, is on the industrial restructuring underway in nonmetropolitan regions of the nation. Four of the more significant points stressed by Brown and Deavers (1987) in their discussion of the industrial transformation of the rural economy are cited below:

> In the decade of the 1960s and 1970s nonmetro areas competed successfully with metro areas in attracting new job opportunities in manufacturing. Roughly 40 percent of nonmetro citizens live in counties primarily dependent on manufacturing for employment. This dependency represents a significant structural transformation of rural America. In the rural South particularly, the growth of manufacturing jobs helped many rural households rise from poverty. At the same time, the growing rural manufacturing base has had a disproportionate representation of low-wage, labor-intensive industry. Again, the South is a case in point because apparel, textile, wood products, leather goods, shoes, and a few other low-wage industries accounted for 40 percent of total nonmetro manufacturing employment in 1983, compared to only 19 percent for the United States as a whole (pp. 1-4).
>
> Nonmetro areas, because of the types of products manufactured there, appear to be bearing a disproportionate share of the shorter term structural adjustments in manufacturing (pp. 1-4).
>
> Rural specialization in production activities has limited employment opportunities for rural workers in the first half of the 1980s. Metro employment grew more than three times as fast (10 percent) as nonmetro employment (3 percent) during 1970-1985. Slow employment growth has meant that nonmetro areas had more difficulty absorbing new entrants to the work force and many manufacturing and mining workers who lost their jobs were not able to find alternative employment. Within goods-producing industrial sectors, nonmetro workers are more likely to have blue collar jobs and less likely to have white collar jobs than metro workers. It is precisely these blue collar jobs that are being lost in the American economy (pp. 1-4).
>
> Service industries now employ many more rural workers than goods-producing industries, and most of the job growth in rural areas since the late 1960s has been in the service sector. The trend appears to have accelerated since 1969. Of all new nonfarm wage and salary jobs created in rural areas, 83 percent have been in the service sector (pp. 1-4). (See Table 6.)

Brown and Deavers conclude their discussion by citing what appears to

Table 5

Projected High Employment Growth Industries

SIC Code	Title	Projected Employment Growth 1984-1995 (in thousands)
580	Eating and Drinking Places	1,255.9
739	Miscellaneous Business Services	801.4
737	Computer and Data Processing Services	675.6
820	Educational Services (incl state/local)	618.9
736	Personnel Supply Services	546.6
805	Nursing and Personal Care Facilities	505.4
541	Grocery Stores	499.1
531	Department Stores	441.1
508	Machinery, Equipment, Supplies (wholesale)	409.5
801	Office of Physicians	405.5
810	Legal Services	399.7
734	Services to Buildings	333.9
891	Engineering and Architectural Services	325.5
930	Local Government (ex Hosp & Ed)	316.3
920	State Government (ex Hosp & Ed)	311.2
806	Hospitals (including state and local)	287.9
421	Trucking, Local and Distance	246.8
701	Hotels, Motels, and Tourist Courts	246.4
357	Office and Computing Machines	229.6
799	Misc. Amusement/Recreation Services	212.7
893	Accounting, Auditing, and Bookkeeping	205.4
808	Outpatient Care Facilities	199.3
594	Miscellaneous Shopping Goods Stores	181.9
367	Electronic Components and Accessories	173.7
836	Residential Care	172.8
366	Communication Equipment	169.9
307	Miscellaneous Plastic Products	167.3
809	Health and Allied Services, N.E.C.	164.0
602	Commercial and Stock Savings Banks	161.8
489	Communication Services, N.E.C.	149.6
804	Office of Other Health Practitioners	141.9
753	Automotive Repair Shops	136.8
633	Fire, Marine, and Casualty Insurance	134.0
154	Nonresidential Building Contruction	132.3
802	Office of Dentists	125.3
832	Individual and Family Social Services	105.3
491	Electric Services	104.9
275	Commercial Printing	97.2
514	Groceries and Related Products (wholesale)	95.8
621	Security Brokers and Dealers	94.9

Source:
Pulver, G. C. (1986). Community economic development strategies (p. 6). Madison, WI: University of Wisconsin-Madison, Cooperative Extension Service.

Table 6

Industrial Composition of Nonfarm Wage and Salary Employment by Metro-Nonmetro Residence, 1969-1984

Industry	Metro			Nonmetro		
	1969	1977	1984	1969	1977	1984
Agriculture, Forestry, and Fisheries	-*	.01	.01	.01	.01	.01
Mining	-*	.01	.01	.02	.03	.03
Construction	.05	.05	.05	.05	.06	.06
Manufacturing	.25	.20	.17	.24	.22	.20
Transportation and Public Utilities	.06	.05	.05	.05	.05	.05
Trade	.21	.22	.22	.22	.21	.21
Finance, Real Estate, and Insurance	.06	.07	.08	.03	.04	.05
Services	.19	.22	.26	.18	.19	.21
Federal Government	.07	.06	.05	.07	.05	.04
State and Local Government	.11	.12	.11	.15	.15	.14

*Less than one percent.

Source:
Brown, D. L., & Deavers, K. L. (1987). Rural change and the rural economic policy agenda for the 1980's (pp. 1-18). In Rural economic development in the 1980's: Preparing for the future (Chapter 1). Washington, DC: Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division.

them to be three major challenges of the industrial restructuring of the rural economy:

> First, rural manufacturing employment is heavily concentrated in low-wage industries and, within these industries, in blue-collar occupations. Thus, rapid job losses in low-wage manufacturing are likely to have a disproportionate negative effect on nonmetro areas. Second, rural areas do not appear to be attracting a large share of the "high tech winners" among new service jobs. Third, particular industrial activities are concentrated in the South and East. This means that a geographically concentrated group of nonmetro areas may experience structural employment problems at the same time. This situation is similar to the current regional concentration of financial stress in the farm sector (pp. 1-5).

The basic shift in the United States economy to a service-oriented economy and the negative consequences of this for nonmetro regions is cited by many other observers. Henry, Drabenstott, and Gibson (1986) were emphatic in assuring that urban areas have benefited more from this shift than rural regions (p. 37). In support of this, they report that "more than two-thirds of the new jobs created in the United States between the fourth quarter of 1979 and the fourth quarter of 1984 were in services—over 3.6 million jobs"—and that "seven out of every eight of the new service jobs were in metropolitan areas" (p. 37). Moreover, according to these authors, most new service employment gains are in fields that require large concentrations of population to prosper (e.g., business services, computer and data processing services, and temporary help services), precisely the prerequisites that rural areas do not enjoy (p. 37).

The observations of Henry, Drabenstott, and Gibson are not necessarily shared by all. James P. Miller and Herman Bluestone (1987), economists with the ERS/USDA, while sharing the position that rural areas have not thus far benefited from the rapid expansion of services nearly as much as metro areas, offer some hope. They believe that "over a longer time span, however, rural service employment might be linked to a long wave of development, one that parallels but always lags behind the urban cycle" (pp. 6-12). Moreover, they also hold out the possibility that "eventually, rural areas may benefit from the rapid improvements of information technology telecommunication, satellite transmission, and personal computers" (pp. 6-12) and that some advanced export services may be more economically provided via telecommunications from rural areas (pp. 6-12).

The Continued High Unemployment Patterns in Rural Areas

Brown and Deavers' (1987) discussion of the nonmetropolitan unemployment patterns in the post 1979 recession period is also of significance. According to these authors:

> The nonmetro unemployment rate, that prior to the 1970s was lower than the metro rate, rose more rapidly, peaked at a higher level, and has remained above the metro rate during the 1980s (pp. 1-2). (See Table 7.)
>
> Nonmetro areas recovered from the 1979 recession more slowly than was true of metro regions—indeed, the nonmetro unemployment rate increased from 1984 to 1985, the latest year for which data were available (in both an official count and the adjusted count), whereas the metro rate for this period showed a slight decline (pp. 1-2).
>
> The use of measures of underemployment, the preferred, truer measure of local labor market performance advocated by some, reveals an even bleaker picture. For example, a greater percentage of nonmetro workers tend to be em-

Table 7

Nonmetro and Metro Unemployment Rates, 1973-1985

Year	(Annual Average Unemployment Rate Percent) Nonmetro		Metro**	
	Reported	Adjusted*	Reported	Adjusted*
1985	8.4	13.0	6.9	9.9
1984	8.1	12.2	7.3	10.4
1983	10.1	14.9	9.4	13.1
1982	10.1	14.9	9.5	13.1
1981	7.9	11.5	7.5	10.3
1980	7.3	10.7	7.0	9.5
1979	5.7	8.5	5.8	8.0
1978	5.8	8.8	6.1	8.4
1977	6.6	9.8	7.3	9.3
1976	7.0	10.2	8.0	10.6
1975	8.0	11.6	8.7	11.5
1974	5.1	7.9	5.8	7.9
1973	4.4	7.1	5.1	7.1

*Unemployment rate adjusted to include discouraged workers and half of the workers employed parttime for economic reasons.

**Metro area delineation was updated in 1985 and is not directly comparable with earlier years in data series.

Source:
Brown, D. L., & Deavers, K. L. (1987). Rural change and the rural economic policy agenda for the 1980's (pp. 1-17). In Rural economic development in the 1980's: Preparing for the future (Chapter 1). Washington, DC: Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division.

ployed in jobs that provided marginal earnings, working parttime when fulltime employment was preferred, or were discouraged from seeking employment. Work done by Lickter in 1987 established that 25 percent of nonmetro workers were underemployed compared to an unemployment rate of 10 percent (both percentages were below those for metro workers in the same age cohort) (pp. 1-3).

The Reduced Population Growth of Rural Regions

The popularly labelled "rural population turnaround" of the 1970s that saw the rate of nonmetropolitan areas in the aggregate experience greater population growth than metropolitan regions was unprecedented and unforeseen (Long and DeAre, 1982) and continues to occupy the attention of demographers. It reversed a trend established during World War II that lasted until the 1960s. The period from World War II to 1960 was the second of what some demographers refer to as the "two long waves of accelerating metropolitanization" in this country (the first began at the turn of the century and lasted until the Great Depression of the 1930s) (Long, 1988).

There appears to be a consensus concerning the groups that contributed to the rural population turnaround of the 1970s. According to Larry Long (1988), a demographer with the Center for Demographic Studies, Bureau of the Census, the demographic groups accounting for much of the rural growth were "...young families with children, middle-aged persons, and persons of retirement age. Not contributing to rural growth in the 1970s were Blacks and persons of young adult age, who continued to migrate to cities" (p. 3). Equally surprising to many was the resurgence of the population of all rural areas, even those not adjacent to metro regions, thus reversing still another long-term trend (the traditional positive association between level of urbanization and the rate of population growth) (Long and DeAre, 1982). Long and DeAre report that:

> In general, growth was shifting to nonmetropolitan counties with relatively low urbanization and more accustomed to population stagnation or decline than to growth rates that exceed the national average. Among metropolitan areas growth was also shifting down the size-of-place scale. In the 1960s, except for the largest metropolitan areas (a population of more than three million), the larger ones grew more rapidly than the small ones. In the 1970s smaller metropolitan areas grew faster than large ones, and the largest lost population. Not only was growth shifting toward the nonmetropolitan sector—an indicator of deconcentration—but within both the metropolitan and the nonmetropolitan sectors growth was also shifting toward less urbanized settings (p. 1112).

The changes in the population growth patterns on the size-of-place scale for the 1960 to 1970 and 1970 to 1980 periods are shown in Table 8.

However, the rural renaissance of the 1970s has not extended into the 1980s. As shown in Table 9, the rate of population growth for nonmetro areas for the first half of the present decade was 7.4 percent, well below that of metro areas (11.5 percent) and that of the nation (10.5 percent).

Other significant aspects of the reversal of the rural population turnaround of the 1970s cited by Brown and Deavers (1987) are:

> Although nonmetro growth decreased during the late 1970s and early part of this decade, there was not a net outmigration from nonmetro to metro until 1982-83, a trend that has accelerated in the past few years reaching 632,000 persons between 1985 and 1986 (pp. 1-8). (See Table 10).

> Moreover, approximately one-third (853) of the 2,383 nonmetro counties lost population between 1980 and

Table 8

Population Change in Metropolitan and Nonmetropolitan Settings, 1960 to 1980

Populations	Change in Population (Percent) 1960 to 1970	1970 to 1980	Population in 1980 (in thousands)
United States	13.4	11.4	226,505
Nonmetropolitan counties not adjacent to a metropolitan area			
Largest settlement			
Under 2,500	-4.2	14.6	4,543
2,500 to 9,999	-2.1	13.1	10,255
10,000 to 24,999	5.3	13.7	7,120
25,000 or more	8.6	15.0	4,124
Nonmetropolitan counties adjacent to a metropolitan area			
Largest settlement			
Under 2,500	-0.8	19.0	3,157
2,500 to 9,999	3.5	17.0	13,236
10,000 to 24,999	9.0	17.8	12,467
25,000 or more	10.9	12.2	5,610
Metropolitan areas			
Under 100,000	14.8	20.4	3,611
100,000 to 249,999	16.2	17.8	18,461
250,000 to 499,999	17.0	16.9	24,883
500,000 to 999,999	17.0	11.6	28,640
1,000,000 to 2,999,999	23.8	12.2	50,524
3,000,000 or more	11.1	-0.8	39,875

Note: Metropolitan area boundaries are as of January 1, 1980. Population size categories are as of 1970.

Source:
Long, L., & DeAre, D. (1982). Repopulating the countryside: A 1980 census trend. Science, 217, 1112.

Table 9

Metropolitan and Nonmetropolitan Annualized Population Change, 1960-1985

Area	1960-1970	1970-1980	1980-1985
	Population growth per 1,000 per year		
United States	12.7	10.9	10.5
Metro*	16.1	10.1	11.5
Nonmetro	2.5	13.5	7.4

*Metro areas as defined in 1970.

Source:
Brown, D. L., & Deavers, K. L. (1987). Rural change and the rural economic policy agenda for the 1980's (pp. 1-22). In Rural economic development in the 1980's: Preparing for the future (Chapter 1). Washington, DC: Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division.

Table 10

Metro-Nonmetro Migration, 1980-1986

Migration stream	1980-1981	1981-1982	1982-1983	1983-1984	1985-1986
Metro to nonmetro	2,350	2,366	2,066	2,258	1,807
Nonmetro to metro	2,156	2,217	2,088	2,609	2,439
Net to nonmetro	194	149	-22	-351	-632

Note: For 1980-1983, metropolitan areas are as defined in 1970; 1984 metropolitan definition used thereafter (noninstitutionalized population).

Source:
Brown, D. L., & Deavers, K. L. (1987). Rural change and the rural economic policy agenda for the 1980's (pp. 1-23). In Rural economic development in the 1980's: Preparing for the future (Chapter 1). Washington, DC: Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division.

1985; this is nearly double the number of nonmetro counties (462) that lost population during the decade of the 1970s (pp. 1-8). (See Table 11.)

Furthermore, the nonmetro population decline that was concentrated in the Plains and Western Corn Belt in the 1970s has in addition spread to the Lower Great Lakes and to parts of the South (Appalachia, Delta, Texas Plains) during 1980-85 (pp. 1-8). (See Figure 3.)

To further illustrate the depth of the reversal, Brown and Deavers offer the important perspective that the most recent nonmetro losses are equivalent to the average annual losses in the 1950s, higher than those of the 1960s, and a significant departure from the growth of the 1970s.

A number of attempts have been made to explain both the unusual patterns of the 1970s and the reversion to long standing trends that have occurred thus far in this decade. In explaining the phenomena of the 1970s, Brown and Deavers (1987) suggest that both economic and non-economic factors (e.g., an increasingly diversified and revitalized nonmetro economy, community modernization, and deeply held preferences for rural living) account for the nonmetro population revival of the 1970s (pp. 1-8).

In an earlier examination of the social and economic characteristics of the population of metro and nonmetro counties for the decade 1970-80, another team of specialists from the ERS/USDA (McGranahan, Hession, Hines, and Jordan, 1986) concluded that many factors that encouraged the rural population turnaround of the 1970s appear to have lost salience. These include:

> The interstate highway system, that facilitated the decentralization of manufacturing and population in the 1970s, has been largely completed and in operation for some time; most firms that were encouraged to relocate by this system likely have already done so (pp. 39-40).
>
> The decentralization of manufacturing in the 1970s was also prompted, at least in part, by the lack of unionization and lower wage rates in nonmetro areas. More recently, some national unions have shifted their priorities from wages to job security, a trend that could reduce the labor cost advantage of nonmetro areas. Moreover, nonmetro manufacturing has also been negatively affected by international competition (p. 40).
>
> The nonmetro growth of the 1970s was prompted in part by crime and social unrest in the cities in the late 1960s, conditions that have lessened (p. 40).
>
> In spite of the growth in the services-producing sector in the 1970s, nonmetro areas continue to specialize in agriculture, mining, and manufacturing, all areas with little prospect for growth (pp. 39-40).

McGranahan and his colleagues also caution that while the four lines of development cited above suggest a slowdown of rural growth, they do not necessarily mean a return to the historical pattern of rural-to-urban migration. They cite as an example:

> The farm sector, a major source of outmigration in earlier decades, is again under economic pressure, but fewer people are now making their living or growing up on farms. Many families remaining have one or more members in off-farm employment, reducing the likelihood of their migration (p. 40).

The continuing decline in the farm population in recent decades, brought about in large measure by the significant long-term increases in farm productivity, is illustrated in data provided by the Department of Agriculture (1987). The USDA reports that in 1985 the farm

Table 11

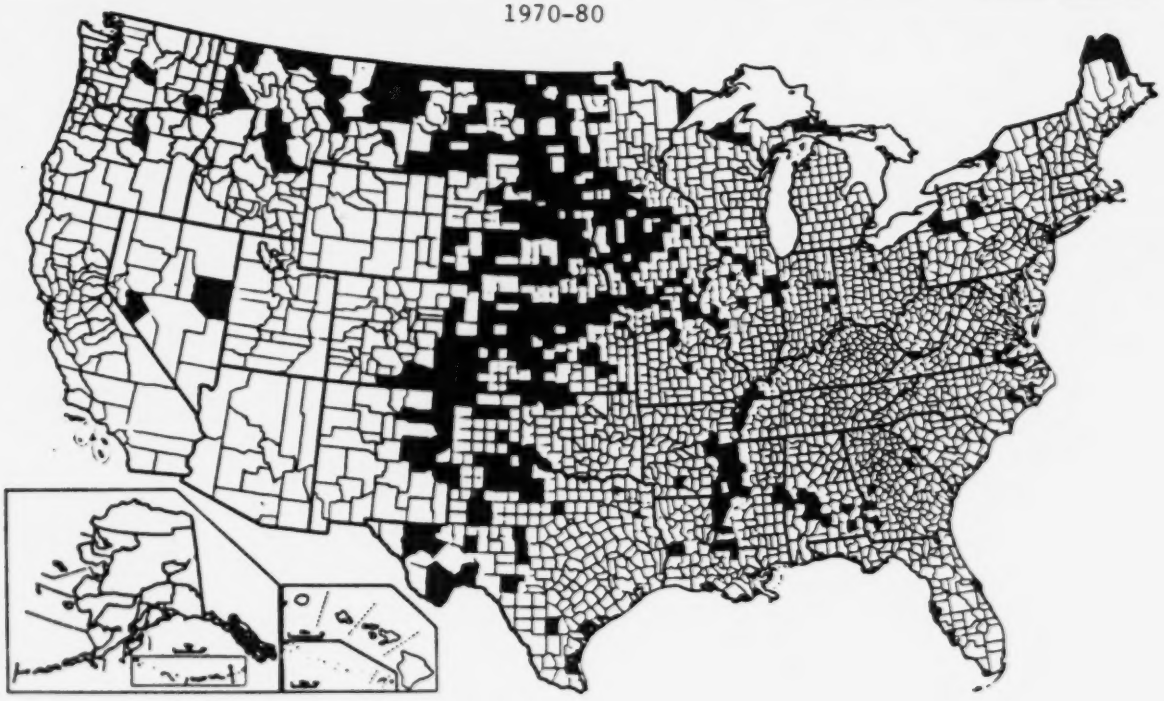
Metropolitan-Nonmetropolitan Population
Change, 1970-1980 and 1980-1985

County Type	Number Counties	Pop. 1985 (000)	Pop. 1980 (000)	Percent Change	Average County Pop. 1980	Number Counties	Pop. 1980 (000)	Pop. 1970 (000)	Percent Change	Average County Pop. 1970
Nonmetropolitan Total	2,383	56,471	54,428	3.75	22,840	2,383	54,428	47,586	14.4	19,969
Gaining Pop.	1,530	40,497	38,037	6.47	24,861	1,920	48,767	41,632	17.1	21,683
Losing Pop.	853	15,974	16,391	-2.54	19,216	462	5,659	5,951	-4.9	12,881
No Change						1	3	3	-	2,924
Metropolitan Total	714	182,268	172,117	5.90	249,391	714	172,117	155,716	10.5	218,090

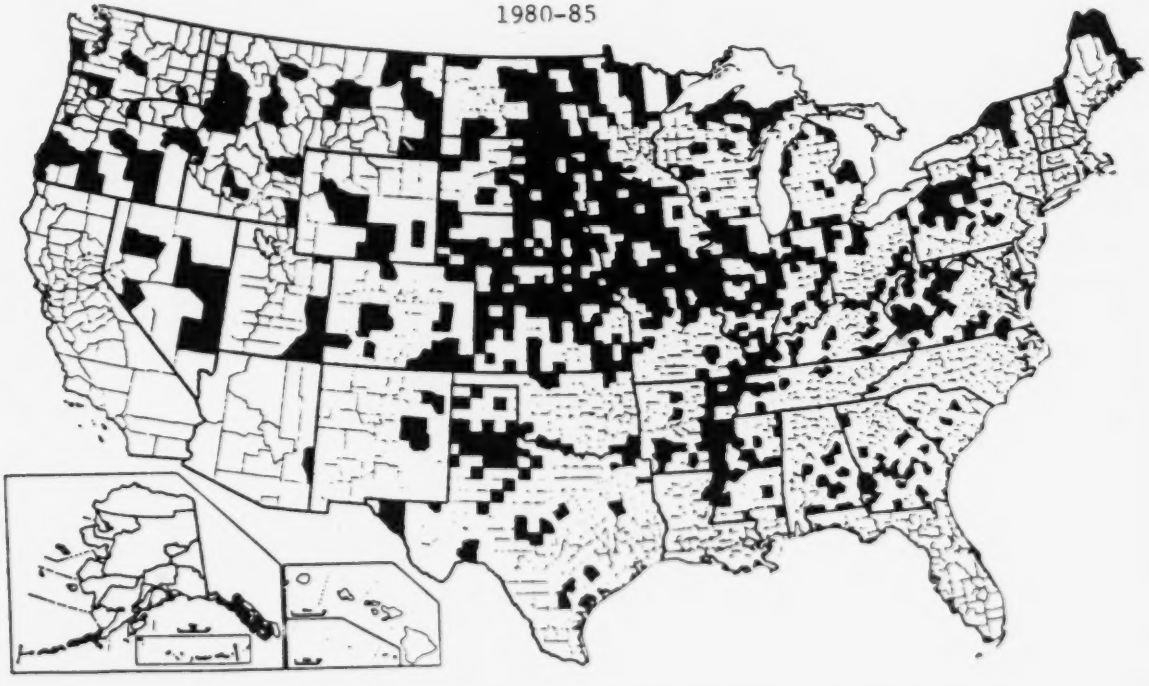
Note: Metropolitan areas as defined in 1983.

Source:
Deavers, K. L. (1987, September). Public policies in rural development: An ERS perspective (p. 75). In A. E. Luloff (Ed.), Proceedings of the rural people and places: A symposium on typologies (p. 84). University Park, PA: Northeast Regional Center for Rural Development.

1970-80



1980-85



Source: Department of Commerce. (1986). Statistical abstract of the United States (p. I-28). Washington, DC: Bureau of the Census.

Figure 3
Nonmetro Counties With Declining Population
1970-1980 and 1980-1985

population was less than 5.4 million, as shown in Table 12, and now is a minority of even the rural population (defined as including all persons living in the open country and in towns of less than 2,500 residents) (p. 106). Rogers, Burdge, Korsching, and Donnermeyer (1988) provide the startling estimate that there are presently more people employed fulltime in the colleges and universities of the nation than in farming (p. 6).

Although cautioning that the full significance of the crisis in agriculture since the early 1980s is still not known, USDA projects that future losses in the farm population will not be as pronounced as those of the past three decades. This projection is due primarily to the belief that the "present population is more in line with the state of farming technology, and many farm people also work off the farm" (p. 106).

The projected near record setting pace of immigration to the United States thus far in the decade of the 1980s will apparently have little impact on nonmetro regions. Through 1987, four million legal immigrants were admitted and another 1.8 million are projected by 1990. The addition of approximately 2.4 million immigrants who in 1988 have sought amnesty under the new immigration law would put the figure for the decade near the record set in 1901-1910 (Immigration and Naturalization Service, 1986). However, the settlement patterns of immigrants favor metro areas. Long (1988) estimates that 85 percent of immigrants locate in metropolitan areas, and this is one reason why metropolitan growth has outpaced nonmetropolitan growth in the 1980s (p. 4). Moreover, the Immigration and Naturalization Service data show that nearly 70 percent of the total immigrants in 1987 located in the metropolitan regions of the six states of California, Florida, Texas, New York, New Jersey, and Illinois, continuing a pattern begun earlier in the decade (Arocha, 1988).

The Changing Demographics of Nonmetropolitan Areas

The changing demographics of the nation, while affecting metropolitan and nonmetropolitan areas alike, is nonetheless another significant consideration in portraying trends in rural America. This is so because, as Brown and Deavers (1987) remind us:

> Rural areas have traditionally had a higher proportion of children, relatively fewer younger adults and middle age groups, and a larger proportion of the elderly. These residential differences have been accounted for by a higher level of fertility in rural areas, out-migration of young adults, and both immigration of older persons and aging in-place (pp. 1-9).

The United States Census Bureau projects that the nation's population will continue to age substantially as well as disproportionately in the years ahead, thus continuing a pattern begun much earlier. The median age in 1987 was estimated to be 32 years, a decade older than in 1880, a change brought about largely by a diminished proportion of children and an increasing proportion of elderly. Brown and Deavers (1987) use United States Census Bureau data showing that youths and infants accounted for 44 percent of the population in 1880 and elderly persons only accounted for approximately three percent. The infant and youth population had declined to less than 30 percent in 1987, whereas Americans presently 65 years or older represent over 10 percent of today's population (pp. 1-9).

Despite these general population patterns affecting the entire nation, Brown and Deavers state:

> Nonetheless, the nonmetro population in 1980 still had a larger proportion of infants and children than the metro population. In contrast,

Table 12

Rural Population, 1950-1985

	[in millions] Total	Nonfarm	Farm**
Previous farm definition*:			
1950	54.5	31.5	23.0
1960	54.0	38.4	15.6
1970	53.9	44.2	9.7
Current definition:			
1980	59.5	53.4	6.1
1984	***	***	5.7
1985	***	***	5.4

*Rural population includes all persons living in the open country and in towns of less than 2,500 inhabitants.

**Farm under the previous definition consisted of persons on places of 10 or more acres if at least $50 worth of farm products were sold in the reporting year, and places under 10 acres with $250 worth of sales. Under the current definition, the farm population consists of persons living on places with sales of agricultural products of $1,000 or more.

***Not available.

Source:
Department of Agriculture. (1988). 1988 agricultural chartbook (p. 106). Agricultural Handbook No. 673. Washington, DC: Author.

because of aging-in-place and net immigration of elderly persons from metro counties, the nonmetro population appears to have aged more than the metro. The working age population grew somewhat more rapidly in metro areas because the baby boom was more dramatic there and because metro areas are still gaining young labor force age immigrants from the nonmetro population (pp. 1-9).

The Continuance of the Rural Personal Income Gap

A useful discussion of the continuing lag in personal income of nonmetropolitan county residents is provided by Henry, Drabenstott, and Gibson (1986). These authors, using data from several federal agencies, not only compared the personal income patterns in all 3,067 counties in the 48 contiguous states for the year 1984, but also examined income levels in the seven types of nonmetropolitan counties used by the ERS/USDA classification system. The computations made by Henry and his colleagues are reported in Table 13 and in Figure 4, along with population and employment data used to support their calculations and to stress other significant patterns.

Other observations by the authors include:

> Per capita income for metropolitan counties was approximately $14,000 ($4,400 in 1967 dollars) compared to approximately $10,000 ($3,300 in 1967 dollars) for all groups of nonmetropolitan counties (p. 25).
>
> Counties dependent on manufacturing accounted for approximately 36 percent of nonmetropolitan personal income and population and about 40 percent of the employment in nonmetropolitan areas, more than any other of the seven classes (pp. 25-26).
>
> The gap in per capita income growth between metro and nonmetropolitan counties grew substantially from 1979 to 1984, and the sectors of nonmetropolitan counties lagging the most are the traditional rural counties of agriculture, manufacturing, and mining (pp. 32-33).
>
> Two of these traditional rural county groups, agriculture and mining, showed the greatest income instability since 1965 (p. 33).
>
> The gap between metropolitan and nonmetropolitan personal income appears to be structural and unrelated to any of the four recent business cycles experienced in this country for which analyses were made, the periods 1965-69, 1969-73, 1973-79, and 1979-84 (p. 36).

The Persistence of Poverty in Rural Areas

Poverty in America is clearly not limited to nonmetropolitan areas nor is it a new phenomenon in rural areas (Hansen, 1971; President's National Advisory Commission on Rural Poverty, 1967; Weller, 1966). However, as Brown and Deavers (1987) point out, rural areas continue to have a disproportionate share of the poor:

> In 1983, the nonmetro poverty rate was substantially higher than for metro areas, 18.3 percent compared to 13.8 percent (pp. 1-6). (See Table 14.)
>
> In addition, the characteristics of the nonmetro and metro poor also differ with the former more likely to be elderly, white, and live in the South (pp. 1-8).
>
> The composition of the nation's poor also changed in the decade 1973 to 1983. While most of these changes have affected metro and nonmetro regions in a similar way, others further differentiate the two regions. For example, the oldest of the elderly population (those 80 years and over), who are disproportionately located in nonmetro areas, have only three-fourths the income of the elderly in metro areas. Moreover, while the poverty rate for

Table 13

Population, Personal Income, and Employment, Metropolitan and Nonmetropolitan Counties, 1984

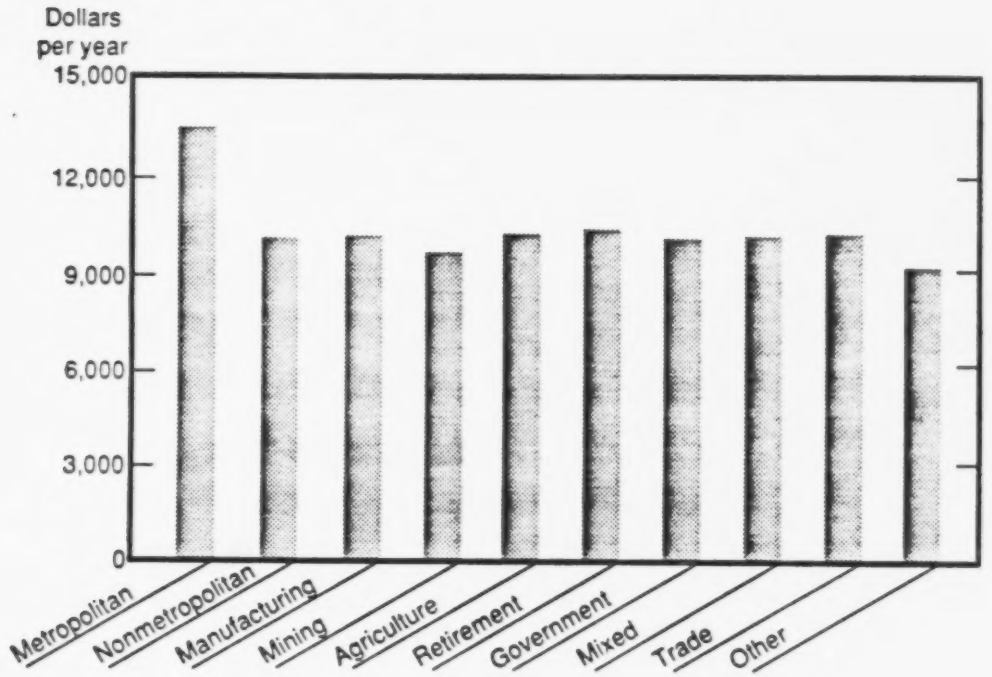
County Type	Number*	Population (Thousands)**	Population Percent of Total	Personal Income (Billions of dollars)	Personal Income Percent of Total	Employment (Thousands)***	Employment Percent of Total
All Counties	3,067	232,882	100.00	2,971.52	100.00	91,546	100.00
Metropolitan	626	168,302	72.27	2,309.58	77.72	72,029	78.68
Nonmetropolitan	2,441	64,580	27.73	661.94	22.28	19,517	21.32
Manufacturing	618	23,401	36.23	240.76	36.37	7,703	39.47
Mining	176	3,918	6.07	38.01	5.74	1,115	5.71
Farm	602	7,407	11.47	77.57	11.72	1,782	9.13
Retirement	222	7,316	11.33	76.97	11.63	2,115	10.84
Government	239	8,329	12.90	84.26	12.73	2,538	13.00
Mixed	128	1,896	2.94	17.75	2.68	530	2.72
Trade	370	10,571	16.37	110.75	16.73	3,228	16.54
Other	86	1,742	2.70	15.87	2.40	506	2.59

*Economic Research Service, Department of Agriculture, modifications by the authors.

**Bureau of Economic Analysis, Department of Commerce.

***Bureau of Labor Statistics, Department of Labor. Includes private and civilian government employees for second quarter 1984. Excludes farms with fewer than ten employees.

Source:
Henry, M., Drabenstott, M., & Gibson, L. (1986, July-August). A changing rural America (pp. 24-25). Economic Review.



Source:
Henry, M., Drabenstott, M., and Gibson, L. (1986, July-August). A changing rural America (p. 26). *Economic Review.*

Figure 4
Mean Per Capita Income, Metropolitan and Nonmetropolitan Counties, 1984

Table 14

Selected Characteristics of the Poor by Metro-Nonmetro Residence, 1973-1983*

Item	U. S. 1973	U. S. 1983	Metro 1973	Metro 1983	Nonmetro 1973	Nonmetro 1983
Poverty rate for:			Percent			
Total population	11.1	15.2	9.7	13.8	14.0	18.3
Children in households with female householders, no spouse present	52.1	55.4	51.8	54.5	52.9	58.0
Blacks	31.4	35.7	28.2	33.4	41.1	43.3
Aged	16.3	14.1	12.7	12.1	22.5	17.8
Farmers	13.4	23.7	N/A	N/A	N/A	N/A
Percentage of poor who are:						
Children in households with female householders, no spouse present	22.5	19.0	27.7	22.1	14.8	14.8
Whites	65.9	68.0	61.4	63.3	72.6	75.5
Blacks	32.2	28.0	36.3	32.3	25.9	21.2
Aged	14.6	10.5	12.1	9.3	18.4	12.4
Farmers	5.6	3.7	N/A	N/A	N/A	N/A
Householders working full time	18.3	16.9	15.5	12.9	22.2	23.3
Percentage of poor families with:						
No workers	38.1	40.5	42.4	46.1	32.1	31.8
Two or more workers	20.0	20.7	15.7	15.4	26.1	28.9

N/A Not applicable.

*Metropolitan areas as defined in 1970.

Source:
Brown, D. L., & Deavers, K. L. (1987). Rural change and the rural economic policy agenda for the 1980's (pp. 1-21). In Rural economic development in the 1980's: Preparing for the future (Chapter 1). Washington, DC: Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division.

youths increased from 14 to 22 percent in the nation since 1973, it is more pronounced in nonmetro areas where the poverty rate is 43 percent for female-maintained families compared with 13 percent for other family households (pp. 1-7).

Rural poverty continues to be concentrated in the South but is decreasing (the proportion of the nonmetro poor living in this region declined from 60 percent in 1973 to approximately 50 percent in 1985). This regional shift is due to improved conditions in the South and from a worsening of economic conditions elsewhere in the nation, especially in agriculture, energy, and mining oriented regions (pp. 1-7).

One of the seven categories used in the ERS/USDA typology of nonmetropolitan America was the designation of "persistent poverty counties" (Bender, et al., 1985). Poverty counties total 242 (or 10 percent of all nonmetropolitan counties), are concentrated in the Southeast (92 percent are in Appalachia, the Ozark-Ouachita Plateau, and the Mississippi Delta), and their populations have a high percentage of racial minorities relative to other categories of nonmetropolitan counties (p. 12). Moreover, persistent poverty counties relative to other counties tend to have "a sparse and nonurban population settlement pattern, low income levels that have persisted for decades, and disproportionate numbers of people with disadvantages affecting their productive labor force participation" (p. 13).

In a recent article in *Newsweek*, John McCormick (1988) referred to the large number of rural poor as "America's Third World" in arguing that conditions in many rural areas of the nation are "deteriorating at an alarming rate" (p. 21). He cites as particularly troubling data that show that:

One-fourth of all rural children now live in poverty... that infant mortality in America's 320 poorest rural counties tops the national rate by a chilling 45 percent...that America's rural-poverty rate now slightly exceeds the rate of our blighted big cities (p. 21).

The Persistence of Underdeveloped Rural Human Resources

It is generally acknowledged that economic, social, and political changes in rural America both affect and are affected by the human resource base of the rural economy. This paper will attempt to establish the presence or absence of a number of critical characteristics of the rural population that are viewed by most as important considerations in rural economic development efforts.

Linda Swanson, a sociologist, and Margaret Butler (1987), an economist, both with the Agriculture and Rural Economy Division of the ERS/USDA, discussed the human resource base of rural areas:

While the long-standing pattern of rural youth migration to metro areas slowed during the "rural renaissance" of the 1970s, it did not cease, despite increased employment opportunities in many rural areas (p. 7-1). (See Table 15.)

Nonmetro areas in all four regions of the nation have a significantly lower proportion of the population among potential workers (those ages 16 and over) of young people and adults between the ages of 20 and 44 (p. 7-3). (See Table 16.)

Nonmetro areas lagged behind metro areas on all three measures of level of education used for the year 1980: the average education in terms of years of school completed, the percentage of the population that completed four or more years of college, and the high school dropout rate (pp. 7-5 - 7-7).

Table 15

Nonmetro Areas Show Greatest Loss to Metro Areas Due to Net Outmigration Among Young Adults in 1985-1986

Nonmetro Region	16-19 Years	20-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65+ Years
				Percent*			
Northeast	-4.00	-9.86	-8.28	-4.40	-3.61	-1.77	-1.19
Midwest	-1.44	-6.34	.28	-1.57	- .80	- .12	.54
South	-2.96	-3.64	-1.77	- .36	.81	1.80	.19
West	-3.17	-6.16	-4.21	-2.13	-1.53	.40	- .34
United States:							
Exchange within region	-2.88	-4.89	-2.20	- .79	.06	.30	.01
Exchange outside region	.26	- .65	- .03	- .31	- .55	.32	.07
Total net exchange	-2.62	-5.54	-2.23	-1.10	- .49	.62	.08

*Net migration rates for nonmetro areas.

Source:
Swanson, L. L., & Butler, M. A. (1987). Human resource base of rural economies (pp. 7-14). In Rural economic development in the 1980's: Preparing for the future (Chapter 7). Washington, DC: Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division.

Table 16

Percentage Distribution of the Population of Labor Force Age, by Region and Residence, 1980

Item	Total 16 and Over	16-19 Years	20-24 Years	25-34 Years	35-44 Years	45-54 Years	55-64 Years	65 Years and Over
	Thousands			Percent of Total				
U. S. Total	169,579	9.9	12.2	21.6	15.0	13.4	12.8	15.0
Metro	129,358	9.8	12.4	22.3	15.2	13.5	12.7	14.2
Nonmetro	40,222	10.3	11.5	19.8	14.3	13.0	13.3	17.6
Northeast	37,751	9.6	11.4	20.4	14.7	14.0	13.9	16.1
Metro	33,600	9.5	11.4	20.4	14.8	14.1	14.0	15.9
Nonmetro	4,151	10.2	11.3	19.9	14.2	13.2	13.7	17.4
Midwest	44,022	10.2	12.5	21.3	14.7	13.3	12.7	15.2
Metro	31,045	10.2	13.0	22.3	15.0	13.5	12.5	13.6
Nonmetro	12,977	10.3	11.5	19.1	13.9	12.9	13.4	16.9
South	55,704	10.1	12.2	21.6	15.1	13.3	12.6	15.2
Metro	38.025	9.9	12.6	22.5	15.4	13.3	12.2	14.1
Nonmetro	17,679	10.4	11.4	19.5	14.5	13.2	13.4	17.7
West	32,101	9.7	12.7	23.7	15.5	12.9	12.2	13.3
Metro	26,689	9.6	12.8	23.9	15.6	13.0	12.0	13.1
Nonmetro	5,413	10.3	12.1	22.7	15.0	12.6	12.7	14.7

Source:
Swanson, L. L., & Butler, M. A. (1987). Human resource base of rural economies (pp. 1-13). In Rural economic development in the 1980's: Preparing for the future (Chapter 7). Washington, DC: Department of Agriculture, Economic Research Service, Agriculture and Rural Economy Division.

The importance of human capital for the maintenance and strengthening of the competitiveness of rural areas in economic development activities is widely acknowledged (Hobbs, 1986; Welch, 1975; Williamson, 1979). It is equally well recognized that rural areas do not have the same access to postsecondary training and education opportunities as do urban areas. This problem will take on added importance as the evidence of the need to continually retool the American work force continues to become more apparent.

Moreover, problems exist with the existing (and limited) human resource development programs in rural areas. In a paper that examined the education and training capacity of rural areas, Peggy Ross, a rural sociologist and a colleague of Swanson and Butler at the ERS/USDA, and Stuart Rosenfeld (1987), director of Research and Programs, Southern Growth Policies Board, concluded that:

> In summary, a range of education and training programs exists for human resource development in urban areas. However, few programs contain specific provisions for addressing the unique needs of rural communities and rural people. In fact, the basic design of most programs conforms to an urban model, although, in some instances, special adaptations have been made to accommodate rural problems as in the case of JTPA's displaced farmer programs (p. 15).

The Continuing Financial Crisis in Agriculture

While it is no longer meaningful to equate rural with agriculture, it is still true that agriculture continues to be of substantial importance in rural America. The continuing financial crisis in the 702 farm-dependent nonmetro counties is thus important to outline here. It is a deep-rooted and complex issue, in part because of the increasing dependence of United States agriculture on macro- and international economic forces. In establishing the financial crisis in agriculture, Brown and Deavers (1987) cite the following points:

> Economic Research Service 1985 data show that from 10-12 percent of farm operators face financial difficulty, and that many of those "...are commercial scale operators who are unlikely to be able to restructure their businesses successfully, and thus will be forced from farming" (pp. 1-5).
>
> The heavy concentration of these farms in the Northern Great Plains and Western Corn Belt regions will cause many rural communities in these areas that tend to be "...relatively small in population, sparsely settled, remote from urban opportunities, and with little other economic activity..." to experience great difficulty (pp. 1-5).
>
> While farm-dependent areas have been undergoing nearly three decades of continuous farm consolidation and loss of population, the current adjustments are ominous in that, unlike earlier times, farmers now leaving farming for economic reasons "...tend to be young, relatively well educated, and they operated commercial-scale farms. Past displacements were concentrated among tenant farmers (many of whom were Black, poorly educated)" (pp. 1-6).

Moreover, a recent study of the farm crises in North Dakota and Texas stressed that not only are young, well-educated farmers leaving, but the crises may result in the loss of a high proportion of farmers who are likely to be among the most innovative (Murdock, Albrecht, Hamm, Leistritz, and Leholm, 1986).

The consequences cited by Brown and Deavers that the financial crisis in agriculture is having on rural communities were the subject of a major 1986 study by Thomas Stenson of the University of Minnesota for the United States Senate Committees on Governmental

Affairs. This study, that covered eight midwestern states, established that: net farm income in the areas studied, down 40 percent from the 1970 coverage, has sharply affected rural business and eliminated jobs; the income decline experienced by the agriculture economy has contributed to a 30 percent drop in farm land value in the last four years; and these declines have led to an erosion of local tax bases and contributed to increases in property tax delinquencies.

In discussing the study, United States Senator Durenberger of Minnesota was quoted by Ward Sinclair (1986), a staff writer for the *Washington Post,* suggesting that the findings are:

> ...Awesome...a real sleeper in the larger crisis facing Rural America. It is particularly chronic that at a time when service demands on rural local governments are increasing, then principal revenue sources are falling. This unfortunate coincidence is like hailstones dropping on an already damaged corn crop (p. A5).

A more recent report of the Department of Agriculture (1987) provides an even more startling picture for rural governmental jurisdictions, including school districts, that face the prospect of losses in their assessed valuations because of a drop in the value of farmland over the past few years. As shown in Figure 5, the average decline in land values from 1982 to 1987 for two regions with heavy concentrations of farm-dependent nonmetro counties, the Northern Plains and the Corn Belt, was 48 and 50 percent, respectively.

In a keynote address for a 1985 conference sponsored by the United States Department of Education, Neal E. Hart (1985), an economist at Iowa State University, warned that the nature of the problem for much of rural America that is agriculture is deep-rooted and that agriculture is "going through the most wrenching adjustment in half a century" (p. 2).

Other aspects of the changes in the agricultural sector of rural America are also significant. The uninterrupted increases in agricultural productivity resulting from the long-term improvements in the mechanization of farming and the adoption of other technologies account for much of the historical loss of population in agricultural areas and in the continuing increase in the size of farms. The Department of Agriculture (1987) provides data to illustrate the dramatic changes in labor requirements and yields per acre for three basic commodities since the beginning of the 19th century. As shown in Table 17, the labor requirements in hours to produce 100 bushels of wheat have been reduced from 373 in 1800 to 7 in the 1980-84 period. The yields of wheat per acre have more than doubled (from 15 to 34 bushels). These same patterns are even more remarkable for the other two commodities, corn and cotton.

Other telling evidence of the long-term, virtually unbroken increases in agricultural productivity is the estimate of the Department of Agriculture (1987) that, in 1800, each farm worker produced enough food for four other people (p. 115). Rogers, Burdge, Korsching, and Donnermeyer (1988) estimate that the number of persons supplied their basic food, fiber, and tobacco needs by one United States farmer doubled in the 80 years from 1860 to 1940, doubled again in the next 20 years from 1940 to 1960, and then again from 1960 to 1980. Moreover, they estimate that one farmer in 1960 provided these basics for 26 persons; in 1985, the same farmer produced enough to provide for approximately 78 persons (pp. 6-7).

Rogers, Burdge, Korsching, and Donnermeyer (1988) also provide a useful summary of the second consequence of the long-term improvements in agricultural productivity, the increase in the size of farms. As shown in Figure 6, the average size of farms has increased since 1960, whereas the number of farms is rapidly decreasing (p. 80). Both of these patterns are occurring while the total United States farmland acreage has remained rela-

Source:
Department of Agriculture. (1988). *1988 Agricultural Chartbook* (p. 43). Agriculture Handbook No. 673. Washington, DC: Author.

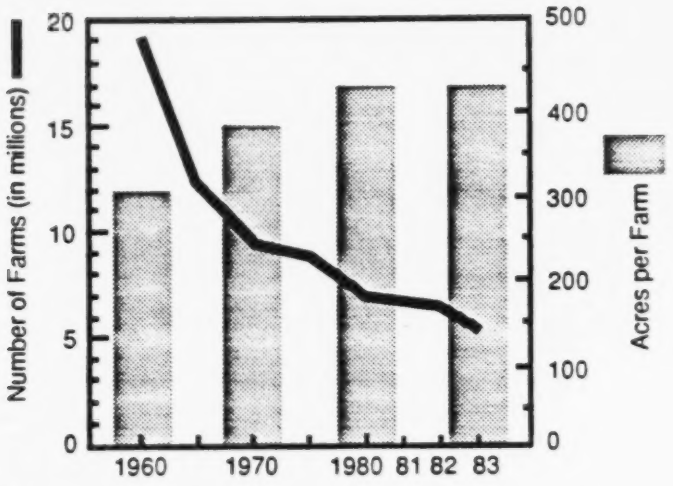
Figure 5
Percent Change in Farm Land Values, 1982-1987

Table 17

Labor Requirements and Yields Per Acre for Three Basic Commodities--1800 to the Present

Labor Required (in hours)	1800	1935-39	1955-59	1980-84
Wheat (100 bushels)	373	67	17	7
Corn (100 bushels)	344	108	20	3
Cotton (one bale)	601	209	74	5
Yields Per Acre	**1800**	**1940**	**1960**	**1985-86**
Wheat (in bushels)	15	15	20	34
Corn (in bushels)	25	29	55	118
Cotton (in pounds)	154	253	446	630

Source:
Department of Agriculture. (1987). Fact book of U. S. agriculture (p. 115). Miscellaneous Publication No. 1063. Washington, DC: Government Printing Office, Office of Governmental and Public Services.



Source:
Rogers, E. M., Burdge, R. J., Korsching, P. F., and Donnermeyer, J. F. (1988). *Social change in rural societies* (p. 8). Englewood Cliffs, NJ: Prentice-Hall.

Figure 6
Average Farm Size and Number of Farms

tively constant. An even larger perspective on these twin developments is provided by the Cooperative Extension Service (CES) of the Department of Agriculture (1986). The CES reports that the number of farms in the nation declined by nearly two-thirds from 1935 to 1983 (from 6.8 to 2.2 million), yet the total acreage in farms decreased by only one percent (p. 11).

The CES also cites relatively recent data to not only establish the increasing size of farms, but also to illustrate the growing importance of off-farm income for the preservation of the family farm and for the continuation of the vitality of agriculturally dependent rural communities. Using data from the Office of Technology Assessment that classified farms into five categories based on the value of farm products sold, the CES reported that "large" and "very large" commercial farmers received approximately 84 percent of net farm income for the year 1982 (p. 11), as shown in Table 18. Farmers in the "small" category (those with sales in 1982 from $5,000 to $20,000) received all of their income from off-farm sources. Farmers classified as "parttime" (with sales in 1982 from $20,000 to $100,000) still received the great bulk of their income from other sources.

Dramatic as the increases in farm productivity have been, the future holds even greater potential for new technology that promises to increase productivity even more, and, of interest here, will cause continued adjustment problems in agriculture. Rex R. Campbell (1987), University of Missouri-Columbia, in a recent commentary piece, has expressed concern about the impact of basic research on biotechnology:

> Like storm clouds on the horizon, looming even closer, there is dramatic new technology which will result from basic research in biotechnology. The new inputs are likely to continue to increase production even faster than demand. The result will be continued downward pressures on prices and fewer economically viable farm operations. Unless public policies are changed, farm operations are likely to continue to consolidate at varying rates of speed until oligarchies in commodity production are formed (p. 535).

In its report on *Revitalizing Rural America* (1986), the Cooperative Extension Service, USDA, using information from the United States Office of Technology Assessment that identified 150 emerging technologies in agriculture, provides several illustrative examples:

> ...By the end of the century technology could: enable Texas cattle ranchers to raise larger cattle; allow Wisconsin dairy farmers to control the sex of their calves and to increase milk production by more than 10 percent without increasing feed intake... (p. 5

The predicti[illegible] the potential changes in the e[illegible]nment that will result from the "G[illegible]enhouse effect" if radical changes in the world's consumption of fossil fuels and other improvements in energy efficiency do not occur in the immediate future also bode ill for much of the current agricultural sector. In a recent invited essay, Jeremy Rifkin (1988), president of the Foundation on Economic Trends, suggested some consequences of potential changes in the world climate by the year 2035. These possible consequences were based on predictions of climatologists and environmental scientists: a two-thirds drop in the flow of the Upper Colorado River Basin, a 40 percent decline in rainfall in the agriculture belt of the mid-West, and the emergence of hundreds of ghost towns in the mid-West (p. 13).

Rifkin has concluded that:

> Although the greenhouse global warming trend cannot be effectively reversed in the short run, it can be slowed down enough to allow us several more decades of lead time to adjust to the epochal change in the climate of the planet (p. 13).

Table 18

Distribution of Farms, Percent of Cash Receipts, Percent of Farm Income, and Farm and Off-Farm Income Per Farm by Sales Class, 1982

Sales Class	Value of Farm Products Sold	Percent of all Farms	Percent of Total Cash Receipts	Percent Net Farm Income	Average Net Farm Income	Average Off-Farm Income	Average Total Income
	Less than $5,000	36.4	1.2	-2.0	($550)	$20,396	$19,846
Small	$5,000-$9,999	12.6	1.5	-0.9	(700)	22,498	21,798
	$10,000-$19,999	11.6	2.8	-0.9	(780)	18,648	17,868
Part-time	$20,000-$39,999	11.1	5.4	0.2	154	14,134	14,288
	$40,000-$999,999	14.9	16.4	5.2	3,451	12,529	15,980
Moderate	$100,000-$199,999	8.1	19.1	14.6	17,810	11,428	29,238
Large	$200,000-$499,999	4.2	21.0	20.4	48,095	12,834	60,929
Very large	$500,000 and over	1.2	32.5	63.5	504,832	24,317	529,149
	All farms	100.0	100.0	100.0	$9,976	$17,601	$27,578

Source:
Cooperative Extension Service. (1986). Revitalizing rural America (p. 11). Washington, DC: Department of Agriculture.

The Growing Fiscal Pressures on Rural, Local Governments

In 1982, slightly more than 63 percent of all local governments in the United States were located outside a SMSA or NECMA (see Table 1). These included over 12,000 of the approximately 19,000 local municipal governments, nearly 9,200 of the nation's approximately 15,000 public school systems for that year, and roughly three-fourths of all other multipurpose (counties and townships) or single purpose local government service providers.

Rural local governments face accelerating fiscal pressures in their attempts to provide basic public services. Traditionally, rural local governments have had problems in the provision of community services widely judged to be important aspects of the quality of life due to their isolation and their lower population and population density that in turn have resulted in higher per capita cost (Rainey and Rainey, 1978). Added to these inherent, long-term problems are the more recent trends of the decline in the value of farmland prices that have caused difficulties for many agricultural communities, the depressed economy in other extraction industries, and the loss of revenue sharing and other federal support programs.

Richard J. Reeder, an economist with the ERS, has conducted extensive studies of the fiscal trends of rural local governments. One of his most recent efforts compared the trends in revenues, expenditures, and debts of both urban and rural governments for the five-year period 1977-82. During this period, all local governments experienced significant reductions in federal aid, and the economic recession of the late 1970s and early 1980s was unfolding. Also, state restrictions on both revenues and spending of local governments were implemented in many states (Reeder, 1988). Reeder's major findings include:

> Real (inflation-adjusted) spending reductions were common, especially in big cities. Rural governments were characterized more by tax and spending increases...revenue efforts have been rising in rural areas relative to urban areas, and revenue efforts in totally rural metro-independent areas now exceed those of large central cities (p. V).

Reeder then suggests several implications for rural areas that have particular relevancy for this exercise:

> A competitive level of public spending is critical. Areas struggling to survive and grow must remain competitive in the services they provide. Otherwise, they will lose population. As industrial location studies have shown, public education and other local services and amenities are important factors in attracting business investment.
>
> Reasonable tax rates are also an important factor in a community's attractiveness to residents and newcomers. The comparative advantage of small, rural communities in terms of local taxes has eroded to the point that many rural areas are now at a disadvantage compared with neighboring urban areas.
>
> Increasing reliance on fees rather than taxes probably shifts more of the costs of local services to lower income people. This, together with rising revenue efforts, may make it more difficult to obtain widespread support for increasing or maintaining services in some rural areas.
>
> Although the decline in education spending may be a product of declining enrollments...it suggests community decline and potential future problems for development.
>
> The trends point out another source of pressure for rural areas. Unless there is either significant growth in rural local income or an increase in transfers from other sources (state or federal governments), some small communities may find themselves

> in a cycle whereby current economic problems contribute to higher tax burdens or reduced government services, accelerating economic and population decline (pp. 3-4).

The Growing Gap in the Rural Infrastructure

A closely allied, yet different, issue concerning the capacity of rural local governments to provide needed public services relates to the rural infrastructure (generally defined to mean prerequisite public works facilities needed to provide and deliver public services). While the literature on the condition of the rural infrastructure is beset with definitional and measurement problems (Cigler, 1987), most observers are in agreement that rural community facility needs are considerable in both a relative sense and in absolute terms.

Particularly troublesome are the limitations in many rural areas of a number of core infrastructures generally acknowledged to be important for economic development (e.g., water, sewage, streets, highways, and mass transit) and those that enhance other aspects of the quality of life (e.g., parks and recreational facilities, libraries, community/civic/cultural centers, and health facilities).

Not only are many rural communities deficit in the availability of basic public facilities but, like their urban counterparts, they have not reinvested in existing facilities on the scale required to prevent structural deterioration or technological obsolescence (Congressional Budget Office, 1983). A recent study by Honeyman, Wood, Thompson, and Stewart (1988) on the deteriorating condition of rural school buildings is illuminating in this regard. According to these authors, funding for capital outlays for school facilities declined by 50 percent nationwide between 1970 and 1983. They estimate that many rural school buildings have major structural deficiencies and that an estimated $1.5 billion is required for renovation—an average of $300,000 in repairs per building (p. 17).

Changes in the Federal Role in the Federal System

Another trend affecting both metro and nonmetro areas alike, but having particular significance for the latter, concerns recent shifts in the federal role in the federal system of government. Brown and Deavers (1987) attribute part of these shifts to a philosophical retrenchment by the federal government (p. 1-11). The Advisory Commission on Intergovernmental Relations (1981) would likely attribute the recent disarray in the role of the federal government to ambiguity and conflict concerning basic approaches to federalism. Whatever the correct assessment, recent changes in the federal role are substantial and are affecting rural areas in particular ways. Brown and Deavers cite the following:

> In the 1960s and 1970s federal (and state) involvement in local government grew. One measure of this was the declining share of locally raised revenues as a share of total local spending (that is, intergovernmental transfers represented 43 percent of rural local governments in 1977 compared to 34 percent in 1962) (pp. 1-11).
>
> In response to the concerns of local governments regarding the burdensome regulations that often accompanied grants-in-aid money, the federal government in the 1970s adopted Federal Revenue Sharing and other block grant programs that lessened control of the use of federal monies by local jurisdictions. Simultaneously, the federal government moved toward deregulation "aimed at letting the marketplace decide on resource allocation, prices, and services in transportation, finance, and communication" (pp. 1-11).
>
> More recently, the federal government has reduced or witndrawn funding for many grants-in-aid programs, block grant programs, and Federal Revenue Sharing. This reduction is due in part to a philo-

sophical retrenchment but also is a response to the perceived need to reduce the federal budget deficits (p. 1-11).

In addition, Brown and Deavers (1987) call attention to the clear lessening of economic policy prerogatives of state and local governments:

> The increased integration of the rural-urban economics and the importance of international trade have increased the stake of rural areas in macroeconomic and trade policies. For example, the 1979 change in the Federal Reserve policy, coupled with the financial deregulation of the early 1980s, produced strong inflation and increased the trade value of the dollar and real interest rates; all of which contributed to the current financial stress in agriculture (pp. 1-12).

Brown and Deavers offer a sobering thought when they further observe:

> But the stake of rural areas in broad macro-level policies may be even more important outside agriculture. Many more of our rural citizens depend for their livelihood on employment in manufacturing and services than on employment in agriculture...compared with the federal government, states and localities are severely limited in the policy responses they can make to deal with industrial restructuring and trade (pp. 1-12).

A slightly different expression of many of the same themes enunciated by Brown and Deavers was made in the recent report by the Cooperative Extension Service (1986) that lamented the changing locus of decisionmaking as one of the critical forces at work in rural America:

> The authority and fiscal responsibility for many rural community functions is currently being pulled in opposite directions. On the one hand, the internationalization of markets, franchising of businesses, and deregulation of the banking system, transportation industry, and other institutions have removed the local control over many community functions.
>
> On the other hand, the New Federalism is returning the authority and responsibility for local services to the communities without transferring the attendant resources. The net result is more than a sense of loss of control on the part of local leaders. Rather, it is the financial stress which results from trying to cope with the escalating demand for local services and the need to upgrade depreciating facilities in the face of declining local revenues and uncertain federal revenue sharing (p. 10).

The negative effects of deregulation on rural economies is also cited by Henry, Drabenstott, and Gibson (1986) as one of the four principal forces that together have contributed to economic problems in rural America in the 1980s. The deregulation of financial markets appears to have helped drive up interest rates which, in turn, have slowed rural business activity. The deregulation of transportation has affected the frequency—indeed, the availability—of airline service to rural locations and has resulted in increased airfares to and from some rural communities, in contrast to lower fares to and from many major population centers. Another result of transportation deregulation is an increase in truck freight rates in some rural regions (pp. 38-39).

A Weakening Political Base

Another uninterrupted change impacting rural America is the continuous weakening of much of the traditional political base of nonmetropolitan regions in national and state legislative bodies. The enunciation of the one man-one vote principle in the famous *Baker v. Carr* (1962) case and its

subsequent extension to virtually all popularly elected governmental agencies appears to have clearly established the principle of an arithmetic majoritarianism in deciding apportionment issues at whatever level, national, state, or local. In the view of James C. Kirby (1971), dean of the Ohio State University College of Law, the use of the simple mathematical rule in apportionment issues has settled much of the ambiguity formerly surrounding the theory of political equality in this nation:

> The chain of reasoning now seems indisputable: voting is prescribed by law; laws must satisfy the equal protection clause of the Fourteenth Amendment; equal protection in politics requires that individual people be treated the same in the political process (p. 191).

Tracking the changes in the nonmetropolitan-metropolitan make-up of the 50-state legislative bodies following the 1970 and 1980 United States population census counts was not attempted here. In 1986 there were over 7,300 individuals serving in the legislatures of the 50 states (Department of Commerce, 1986). However, it seems clear that in many states the nonmetropolitan regions have lost influence in the halls of state government as a result of the past two required reapportionment exercises. This observation is warranted given the widespread movement of population from rural to urban areas in both decades, particularly in agricultural states. Moreover, not all nonmetropolitan areas experienced population gains or the same proportion of gains during the rural renaissance of the 1970s, as established previously.

The prospects for the decade of the 1990s would not appear to alter the general decline in the political base of nonmetropolitan regions in a number of states. Approximately one-third (853 of 2,383) of nonmetropolitan counties lost population between 1980 and 1985. Should this pattern hold for the remainder of the decade, nonmetropolitan areas will again face the reality of a further weakening of their political strength in the reapportionment that will follow the 1990 census of population.

Moreover, it is also assumed that a number of states, especially those having a significant agricultural economic orientation with large nonmetropolitan areas, will continue to experience a lessening of their political strength in national policy debates, in part because of loss of representation in the United States House of Representatives. Care, of course, needs to be exercised in attempting to interpret the significance of the metropolitan-nonmetropolitan issue in changes in the past apportionments of the lower chamber of Congress, as well as those projected for the future. However, it is true that a number of agriculturally oriented states that have a high percentage of rural population have experienced recent losses in their number of representatives and are projected to continue to do so through the year 2000. The shifts in the state apportionment of United States House of Representatives for the period 1850 to the present and those projected to follow the census in 1990 and the year 2000 are shown in Table 19.

The Lessening of Differences in Rural and Urban Social Values

Another change in the context of rural America cited by many is a lessening, but not the complete elimination, of differences in the social values held by residents of metropolitan and nonmetropolitan areas. Rogers, Burdge, Korsching, and Donnermeyer (1988) cite the following as manifestations of the closer coming together of the farm and rural areas to the larger society: the growth of mass media communications that has tended to reduce rural isolation, the substantial increase in the number of farmers who have off-farm employment, the increase in agribusiness, and the growing centralization of decisionmaking in rural economic and political institutions that has also resulted in an increase in rural-urban interaction (pp. 11-16).

However, they also assert:

Table 19

Apportionment of Membership in House of Representatives for Selected Years 1850-1980 and Estimated Changes in 1990 and 2000

	% Rural Popula. 1980	Year 1850	Year 1900	Year 1950	Year 1960	Year 1970	Year 1980	Year 1990	Year 2000	Changes 1950-2000
Apportionment Ratio 1,000	--	93	194	345	410	469	--	--	--	--
Total Number of Representatives	--	237	391	437	435	435	435	435	435	435
Alabama	40.0	7	9	9	8	7	7	-	-	-2
Alaska	35.7	-	-	1	1	1	1	-	-	-
Arizona	16.2	-	-	2	3	4	5	+2	+1	+6
Arkansas	48.4	2	7	6	4	4	4	-	-	-2
California	8.7	2	8	30	38	43	45	+5	+2	+22
Colorado	19.4	-	3	4	4	5	6	-	-	+2
Connecticut	21.2	1	5	6	6	6	6	-	-	-
Delaware	29.4	1	1	1	1	1	1	-	-	-
Florida	15.7	1	3	8	12	15	19	+3	+3	+17
Georgia	37.6	8	11	10	10	10	10	+2	+1	+3
Hawaii	13.5	-	-	1	2	2	2	-	-	+1
Idaho	46.0	-	1	2	2	2	2	-	-	-
Illinois	16.7	9	25	25	24	24	22	-2	-1	-4
Indiana	35.8	11	13	11	11	11	10	-	-1	-2
Iowa	41.4	2	11	8	7	6	6	-1	-1	-4
Kansas	33.3	-	8	6	5	5	5	-1	-	-2
Kentucky	49.1	10	11	8	7	7	7	-	-1	-2
Louisiana	31.4	4	7	8	8	8	8	-	-1	-1
Maine	52.5	6	4	3	2	2	2	-	-	-1
Maryland	19.7	6	6	7	8	8	8	-	+1	+2
Massachusetts	16.2	11	14	14	12	12	11	-1	-	-4
Michigan	29.3	4	12	18	19	19	18	-2	-1	-3
Minnesota	33.1	2	9	9	8	8	8	-	-1	-2
Mississippi	52.7	5	8	6	5	5	5	-	-	-1
Missouri	31.9	7	16	11	10	10	9	-	-	-2
Montana	47.1	-	1	2	2	2	2	-	-	-
Nebraska	37.1	-	6	4	3	3	3	-	-	-1
Nevada	14.7	-	1	1	1	1	2	-	-	+1
New Hampshire	47.8	3	2	2	2	2	2	-	-	-
New Jersey	11.6	5	10	14	15	15	14	-	-	-
New Mexico	27.9	-	-	2	2	2	3	-	-	+1
New York	15.4	33	37	43	41	39	34	-3	-1	-13
North Carolina	52.0	8	10	12	11	11	11	-	-	-1

Table 19 (continued)

	% Rural Popula. 1980	Year 1850	Year 1900	Year 1950	Year 1960	Year 1970	Year 1980	Year 1990	Year 2000	Changes 1950-2000
North Dakota	51.2	-	2	2	2	1	1	-	-	-1
Ohio	26.7	21	21	23	24	23	21	-2	-1	-4
Oklahoma	32.7	-	5	6	6	6	6	-	-	-
Oregon	32.1	1	2	4	4	4	5	-	-	+1
Pennsylvania	30.7	25	32	30	27	25	23	-3	-1	-11
Rhode Island	13.0	2	2	2	2	2	1	-	-	-1
South Carolina	45.9	6	7	6	6	6	6	-	-	-
South Dakota	53.6	-	2	2	2	2	1	-	-	-1
Tennessee	39.6	10	10	9	9	8	9	-	-	-
Texas	20.4	2	16	22	23	24	27	+4	+2	+11
Utah	15.6	-	1	2	2	2	3	-	-	+1
Vermont	66.2	3	2	1	1	1	1	-	-	-
Virginia	34.0	13	10	10	10	10	10	+1	-	+1
Washington	26.5	-	3	7	7	7	8	-	-	+1
West Virginia	63.8	-	5	6	5	4	4	-1	-	-3
Wisconsin	36.0	3	11	10	10	9	9	-1	-	-2
Wyoming	37.3	-	1	1	1	1	1	-	-	-

Sources:

Brace, K. (1988). Washington, DC: Election Data Services.

Department of Commerce. (1975). Historical statistics of the United States: Colonial Times to 1970 (p. 1085). Part 2. Washington, DC: Bureau of the Census.

Department of Commerce. (1986). Statistical abstract of the United States (pp. 237-240). Washington, DC: Bureau of the Census.

Garwood, A. N. (Ed.). (1986). Almanac of the 50 states (pp. 424-425). Newburyport, MA: Information Publications.

> Despite the trend toward a mass society, important rural-urban value differences still exist. They stem from historical, occupational, and ecological differences. Rural-urban value contrasts are such that the modern America farm population resembles the urban population more than it does the farm population of 1950 (p. 12).

In an earlier text, Rogers (1960) preferred to label the merging of rural and urban values as the "reurbanization" of values since "rural values are becoming more urbanized, but urban values are also becoming more rural" (p. 50).

Changes in Family Patterns

Brown and Deavers (1987), using data from the United States Census of Population, conclude that rural households, at least for the present, continue to be characterized by more traditional family structures (a higher proportion of married couple households with minor children, a small proportion of single-parent families, and a much lower proportion of persons living alone) (pp. 1-10). However, they caution that:

> And since some of the principal factors associated with rural-urban differences in family structure have moderated (fertility, age at marriage, conservative attitudes toward family and the role of women), residential differences in family structure may moderate as well (pp. 1-10).

Potential modifications in the traditional household structure of rural residents have important programming consequences for rural local governments. As Brown and Deavers observe:

> An increased prevalence of single-parent, mostly female-maintained households with children implies that the need for public assistance to such householders and their children may be growing in an area. Day Care, income maintenance, and special education programs may be increasingly necessary (pp. 1-10).

In a comprehensive report on the current status of the family in this country, Sara G. McLanahan and Irwin Garfinkel (1986), sociologists at the University of Wisconsin-Madison, portray an even more alarming picture. Using Bureau of the Census data, they established that, by 1983, one child in five lived in a family headed by a single parent (compared to one in 12 as recently as 1960). The authors discuss several of the implications of this pattern compared to children living in households with both parents. They conclude that children of single parents are more likely to drop out of school, give birth out of wedlock, divorce or separate, or become dependent on welfare.

The general patterns of changes in the family structure portrayed by McLanahan and Garfinkel are for the nation as a whole. However, as Brown and Deavers caution, traditional rural-urban differences in the family unit appear to be moderating.

SECTION FOUR: EDUCATIONAL DEVELOPMENTS IMPACTING RURAL, SMALL SCHOOL DISTRICTS

The selected economic, social, and political trends provided in the preceding section and viewed to be of particular importance in reshaping the nonmetropolitan landscape are obviously critical aspects of the changing context of education in a rural setting. However, these developments, important as they are, are not the only changes affecting rural, small schools that must be recognized by the policy and school improvement communities. Profound developments are also occurring in education that must be considered in the design of rural school improvement efforts.

It is not possible here to establish the nature of all of the pedagogical, governance, and organizational developments underway in the discipline, even if a single individual were presumptuous enough to undertake such a monumental task. Rather, what will be attempted as one meaningful way of profiling educational developments impacting rural, small schools is another overview and discussion of the potential consequences of the popularly labelled "first round" of school reform. Following that will be a review of what others are arguing is the best long-term direction that any new initiatives should take in the next generation of efforts to enhance the quality of elementary/secondary education in the nation.

The rationale for the use of this approach is based in part on the acceptance of the premise that the reform movement of recent years is a significant development in education that is probably without precedent in American history. It is truly a tidal wave, not to be confused with the numerous ripples that regularly occur in the profession. Moreover, the "first round" initiatives, as well as those being advanced as the centerpieces of the next round, embrace many pedagogical, governance, and organizational issues, thus reducing a concern that the approach used here might be too delimiting.

No attempt will be made to critique the merits of either the major lines of state sponsored school improvement initiatives implemented during the "first wave" or those being advocated for the next generation of reform. There is no shortage of good, substantive critiques, particularly for the "first wave" initiatives (Keesbury, 1984; Prakash and Wachs, 1984; Raywid, Tesconi, and Warren, 1984; Temar and Kirp, 1987). Rather, the interest here is to establish the direction of one additional, very critical development impacting rural, small school districts.

What follows is a summary of the major features of the "first wave" of reform, along with a review of a number of early speculative pieces on the effects of these initiatives, as well as the major results of a just completed multistate study of the impact of the reform movement on rural schools in Appalachia. This is followed by a similar summary of the projected direction of the next generation of reform.

The "First Wave" of Reform: An Overview

The release of the United States Department of Education's National Commission on Excellence in Education report on *A Nation at Risk* (1983) will be used here to mark the beginning of the "first wave," even though it is clear that a number of states were deeply engaged in improvement efforts for a number of years prior to 1983. This beginning date is being used in part for convenience, as well as in recognition of the merit of the arguments of some that the volume of state sponsored reform clearly accelerated across the country after the report was released. The report should be credited with precipitating widespread interest

in the quality of schools, as well as providing a road map for the states for how this should be done. Chris Pipho (1986) of the Education Commission of the States makes a number of these arguments well:

> When the National Commission on Excellence in Education called for education reform in "A Nation at Risk", it fell in at the head of a parade that had already begun to take shape. Just as Sputnik became a symbol around which the math and science reformers of the late Fifties rallied, the report of the National Commission and the dozen or so other major reports that followed transformed 1983 into a watershed year for American education. It was the year we discovered the term "mediocrity," and the national reports were soon followed by hundreds of reports from state-level task forces and blue-ribbon commissions (p. K1).

Patricia Pine (1985), in a report for the American Association of School Administrators, using data provided the Education Commission of the States, developed one useful summary of school improvement initiatives underway by the end of 1984:

> Forty-eight states had considered new high school graduation requirements, and 35 had approved changes. Twenty-one states had taken steps to improve textbooks and instructional materials. Eight states had approved lengthening the amount of time for instruction. Twenty-four had considered some kind of master teacher or career ladder program (pp. 7-8).

In 1985, a survey of all 50 states conducted by Anne Bridgman (1985), and reported in *Education Week*, established that the pace of state legislative or state executive branch sponsored initiatives was continuing unabated. The Bridgman results are reported using the five topical areas of recommendations used in *A Nation at Risk*, as shown in Table 20.

One of the most recent efforts to track the nature and extent of school reform launched in the five years since *A Nation at Risk* is the just released report of the National Governors' Association (NGA) (1988). This report is the second of a series of annual reports to be issued by the NGA. The report profiles state activity in the seven areas that NGA used in making its initial set of recommendations: teaching, leadership and management, parent involvement and choice, readiness, technology, school facilities, and college quality (1986).

The report confirms the observation of many that the pace of new state reform initiatives has lessened in recent years. More and more states appear to be awaiting assessments of earlier enacted changes or appear to be rethinking how best to bring about long-term improvements in their state systems of elementary/secondary education.

Effects of the "First Round" on Rural Schools

State sponsored reform has been implemented at different times in the nearly five years since the issuance of *A Nation at Risk*. The staggered start of many explains in part why the ultimate effects of the "first round" of reform on rural, small school districts is still largely speculative. However, a number of efforts to estimate possible consequences, each having substantial face validity, were attempted in the first years of the movement, the mid-1980s. Five of these will be summarized below.

Early speculative pieces. Ivan Muse (1984), a rural education specialist on the faculty of Brigham Young University, was one of the first to predict significant economic and staffing difficulties for rural districts should the states implement many of the recommendations of *A Nation at Risk*. This scenario is, of course, what ultimately occurred as many states seemed to focus their initial reform efforts around the report's recommendations, as the previously cited results of the Pine and

Table 20

State Initiatives Related to Recommendations of A Nation At Risk, January 1985

Area of Recommendation	State Initiatives	Number of States		
		Under Consid-eration	Enacted or Approved	Total
Content	Increased graduation requirements	5	43	48
Standards/ Expectations	Statewide assessment	6	37	43
	Promotional gates test	3	8	11
	Exit test	4	15	19
	Raised college admission standards	3	17	20
Time	Add instructional time	7	13	20
	Limit extracurriculars	4	6	10
	Reduce class size	7	13	20
Teaching	Revised certification	16	28	44
	Required competency tests	10	29	39
	Raised education-school standards	10	19	29
	Salary increases/new minimum	17	18	35
	Career ladder/merit pay	24	14	38
	Aid prospective teachers	13	24	37
Leadership/ Fiscal Support	Not reported			

Source:
Bridgman, A. (1985, February 6). States launching barrage of initiatives, survey finds. Education Week, 4(20), 11.

Bridgman surveys attest. Muse's concerns were focused on his perceptions of the heavy resource demands that would be required of rural schools to implement the recommendations. One early estimate of these costs was provided by Allan Odden (1984), who projected that revenues would need to be increased by approximately 20 percent to fund most of the proposals of the report. Odden's projections were for all of elementary/secondary education, not necessarily rural, small school districts.

Three of the other early speculative pieces on the potential effects of the reform movement on rural schools as it was unfolding across the country in the first years following *A Nation at Risk* were offered in separate papers presented at a 1985 United States Department of Education (USDOE) sponsored rural education forum. The first paper by Jerry G. Horn (1985), associate dean, College of Education, Kansas State University, dealt with the general problem of the preparation and recruitment of teachers for rural, small school districts. In commenting on the early emphasis in the reform movement on the preparation of teachers, Horn predicted that:

> ...It seems apparent that considerable energy is being directed toward teacher education programs. However, the unique roles and responsibilities of teachers in rural and small schools are not being considered. In effect, this will likely magnify the impact—programs for rural teachers will not be developed because they will not match accreditation standards and, due to the move to greater specialization and extended programs, fewer teachers will be able to obtain multiple teaching endorsements and/or take college work that will better prepare them to work and live in a rural community (p. 23).

The emphasis of the second paper was on the general topic of equity in the financing of rural schools. The co-authors, John Augenblick and Paul M. Nachtigal (1985), stated that many of the state school improvement initiatives passed generally "exacerbate the 'overburden' of small, rural schools" (p. 19). They predicted that:

> Mandating additional courses in foreign language and advanced mathematics and science, with a stable or declining student population, will result in even smaller classes; the student/teacher ratio will be even less cost effective, if we continue with the traditional educational delivery system. Likewise, efforts to improve quality by requiring stricter teacher certification standards will add to the difficulties already experienced by small schools with specialization (pp. 19-20).

Augenblick and Nachtigal (1985) also provide an additional useful perspective on still other consequences of some state reform legislation that have added other "overburdens" to rural districts (e.g., new requirements for written curriculum for all courses and grade levels, new requirements for monitoring student progress, and new teacher and administrator evaluation requirements) (p. 20). These additional administrative requirements are seldom funded, but rather added to the functions of rural administrators and teachers, who generally already perform multiple assignments (p. 20).

The third paper delivered at the 1985 USDOE forum was specially aimed at examining the impact of the reform movement on rural schools. The author, Roy H. Forbes (1985), was at the time director of the Rural Education Institute at East Carolina University. In his paper, Forbes tended to stress a positive note when he emphasized that rural, small districts may be a "big winner" because the new reform movement, unlike previous movements, focuses on improving education for all children regardless of place of residency (p. 1). Despite this arguably optimistic prediction, Forbes provides a relatively comprehensive assessment of the potential

consequences of the first round of reform for rural schools. His comments address a full range of important considerations, including teacher certification, curriculum, facilities, services, and organization. A number of Forbes' most significant predictions are summarized below:

> While the more in-depth single certification requirements are a positive movement, these will affect rural schools who have need for teachers to be certificated in more than one area; moreover, increased certification requirements will limit the pool of multiple-certified teachers and many rural economically disadvantaged districts cannot successfully compete for these individuals (p. 4).
>
> While increased curriculum requirements are also a positive step for increasing learning opportunities for rural students, these represent a quandary "when coupled with lower class size restrictions in all academic courses, a limited number of allocated teachers and increased certification requirements...and present the school administrator with an almost impossible task" (p. 5).
>
> Many of the new service requirements that call for new counseling and health care (e.g., school nurse) at the elementary level will present a supply/demand problem for rural districts (p. 7).
>
> The use of incentives and disincentives to effect school consolidation (e.g., state receivership for poorly performing districts, increased standards) will affect many rural districts in some states (p. 8).
>
> The focus on student performance has shifted from exclusive concern for basic skills to include higher order thinking skills, and many rural districts will be required to provide new opportunities for students to develop their skills (p. 10).
>
> Some states have mandated computer literacy as a new graduation requirement, and the staffing, curriculum, facilities, and fiscal practices of rural districts will be affected by this movement (pp. 11-12).

A final speculative piece that attempted to project the consequences of the "first wave" of reform on rural, small school districts will be cited here (Stephens, 1987b). In this exercise, an attempt was made to both explain and trace the direction of the thrusts of the "first round" of reform, as well as consider the consequences of these on rural schools. The scope of efforts to improve state systems of elementary/secondary education were viewed as being driven by seven goals (in addition, of course, to the over-arching goal of many reform advocates to enhance economic development).

The intended foci of the seven major lines of state school improvement efforts included: the quality of instructional programs, the competencies and skills of teachers, the quality of the teaching profession, the quality of educational leadership, the monitoring of the quality of school systems, competition in public education, and the structure of the state school system. The intent of the exercise was to offer speculations concerning possible implications of the major lines that the reform movement was taking and to alert the policy communities that the initiatives, both those that were arguably educationally meritorious, as well as those that were arguably detrimental (depending, of course, on one's viewpoint and value system) probably have serious consequences for rural districts. The hypothesized effects are reported in Table 21. Many initiatives are viewed to exacerbate a number of traditional problems of rural schools (e.g., limited size of enrollments, lack of breadth and depth of programs, difficulty in recruitment and retention of staff, and limited financial resources) over which rural districts have little or no control.

Table 21

Intended Focus of State School Improvement Initiatives and Hypothesized Major Effects for Rural Small Districts, 1983-1987

Intended Focus of Initiative	Common Expressions of Intent	Hypothesized Effects
1. Improve the quality of instructional program	Increased graduation requirements; required student achievement testing; required programs for 4-year-olds; longer school day/year; increase retention rates	Most have additional resource and staffing implications
2. Improve the competencies and skills of teachers	More stringent certification requirements; mandated staff development	More staff required because of less flexibility; more monies required for staff development
3. Improve the quality of the teaching profession	More selective entrance and more rigid program requirements for preparation programs; increased minimum salaries; enactment of a form of "career ladder" program	Most have additional resource implications; changes in preparation programs could cause shortages, at least in the short run
4. Improve the quality of educational leadership	More rigid certification requirements for principals; mandated staff development; required principal at each site	Requirement of a principal at each site will require additional resources where this is not the current practice
5. Improve monitoring of quality of school systems	Increased accreditation standards; enactment of form of state receivership for marginal or poorly performing systems	Increase in standards will have resource, program, and staffing implications for districts not in compliance; threat of receivership will cause disruptions and stress in school and community
6. Improve competition in public education	Enactment of a form of family choice option	Losing districts will be further removed from critical mass of students and resources to efficiently and effectively offer needed programs
7. Improve structure of state school system	Forced school district reorganization	Threat of reorganization will cause disruptions and stress in school and community and hinder planning

The State Research Associates' study. In the fall of 1987 the State Research Associates (1988), a Lexington, Kentucky, consulting firm, under contract with the Appalachian Regional Commission (ARC), undertook an examination of the effects of school reform initiatives enacted during the period 1982-87 on rural, small school districts in the 13 member states of ARC. The purpose of the study was to examine the consequences of reform for the schools and for the communities, and to project the future of the movement (p. 3). The study design included: a description of the reform legislation and regulatory activity completed in each state during 1983-1987; scheduled interviews with key state officials in each state; the submission of a survey instrument to each of the 114 rural, small districts in the 13 states designated by ARC; and scheduled interviews with key local district officials and community members in 10 sites in 9 of the 13 states (pp. 3-4).

While acknowledging that sufficient time had not yet elapsed since enactment of many of the reforms to permit an in-depth assessment, the study team felt that it was nonetheless possible "...to determine from the policymakers and participants in the public schools whether or not the reforms appear to have a positive or negative effect" (p. 43). The report offered a number of observations of the effects of the reform movement on rural, small schools in five categories: the administration of the rural school, changes in the classroom, the academic performance of students, the financing of rural schools, and public support for the schools.

Major observations made in the report include:

> Many of the reforms reportedly placed extensive burdens on the typically small administrative staffs of rural districts (thus confirming the 1985 prediction of Augenblick and Nachtigal) (pp. 43-46).
>
> Many rural districts reportedly experienced great difficulty in adding depth and breadth to their instructional programs in response to new mandated graduation requirements, mandatory class size reductions, or mandates for remediation, programs for the gifted, and additional programs for the handicapped (pp. 47-57).
>
> Many rural schools experienced substantial improvements in student test scores (pp. 57-59).
>
> Many of the mandates created additional fiscal pressures on rural schools despite increases in state aid in all of the thirteen ARC states (pp. 63-66).
>
> Most state and local officials believe that public support for education has increased in rural areas as a result of the renewed attention given education in recent years (pp. 66-67).

The Projected Direction of the Next Generation of Reform

Will the tremendous momentum and significant legislative activity of the past few years, in both relative terms and in an absolute sense, lessen or disappear? Some knowledgeable observers caution this might occur once the full implications of the financial resources needed to implement the proposals for change are better understood or if the public becomes disenchanted with the progress of change (Kirst, 1986). Or, if the movement is sustained, will it follow the lines of the "first wave" or will new, fundamentally different priorities emerge?

It should be clear that education will continue to occupy center stage in the policy communities for some time to come. The significant political commitment of the National Governors' Association (NGA) alone virtually assures that this will be the case. Moreover, concerns about the continued commitment of the states to fund reform do not appear to be serious, at least for the present. According to the NGA (1988, p. 44), state aid for public

elementary and secondary education increased by 41 percent, more than twice as much as the inflation rate of 19 percent, between 1982-83 and 1986-87. Whether this pattern holds in the future and which federal and local funding efforts for education materialize is still problematic. These issues notwithstanding, it is also clear that the direction of the reform movement is already undergoing radical change and is likely to continue to do so as many of the initial thrusts are increasingly being viewed as not truly addressing the deep, pervasive issues in education.

What follows is a summary of the themes that may well be the center pieces of the next generation of reform and speculations concerning what the consequences of these new directions might be for rural, small school districts. A number of the themes to be cited represent a continuation of previously introduced initiatives while others are new emphases either ignored in the first round or dealt with only superficially. Moreover, most of the themes were proposed in the latter part of the approximate time period previously labelled the "first wave," the five years since the issuance of *A Nation at Risk*. While those were indeed introduced late in the period 1983-1988, causing many to designate 1986 or 1987 as the beginning of the second round, legislative action did not ordinarily begin until the current year. However, it really is not too critical to establish whether education reform is about to begin or is already in something other than the "first wave." What is important is to recognize that major shifts have occurred in the reform movement and, further, to begin to consider what these changes might hold for rural districts. As was the case in the brief overview of the main lines of the "first wave" of reform presented earlier, no judgments are made whether or not the themes of the "new" initiatives make good public policy.

The 10 themes cited in the exercise are viewed to not only embrace the majority of those mentioned in two other profiles of the new wave of reform (American Association of School Administrators, 1988; Green, 1987), but to extend these in a number of important areas.

One of the centerpieces of the next generation of reform will clearly be the move to restructure schools, a concept given prominence by the recent report of the Carnegie Forum on Education and the Economy (1986) and subsequently endorsed by other prominent advocacy groups (e.g., the National Governors' Association) and the two major national teachers' professional groups. While the concept of restructuring has different meanings (e.g., teacher empowerment, participatory decisionmaking) for those who support it, there appears to be a consensus that at a minimum, long-term educational change will occur only when individual schools and school faculties are given substantial autonomy to establish priorities and freedom to decide how best to achieve these. This central belief, contrary to the premise of the first wave of reform that was largely driven by state mandates, was influenced by the work of Ernest Boyer (1983), John Goodlad (1984), and Theodore Sizer (1984).

In one of his periodic reports on developments in the states that have proven to be so useful in tracking state action, Chris Pipho (1988) reported that in 1987 two states, Massachusetts and Washington, both implemented legislation that would allow substantial restructuring of local schools. This would be accomplished by empowering teachers and other local constituencies in an initial number of pilot sites and under certain conditions to secure waivers from state or local district policies, or to pursue new governance approaches for decisionmaking through local district contractual agreements.

A second, closely related, projected emphasis will be on the continued efforts to enhance the competencies and skills of teachers and improve the quality of the teaching profession, two themes of the "first wave." However, there now clearly appears to be a consensus that there must be more rigorous entrance standards for those aspiring to become teachers, more rigorous teacher preparation programs (Carnegie Forum

on Education and the Economy, 1986; Holmes Group, 1986), more meaningful teacher certification standards, and more emphasis on the quality of the workplace that promotes both good teaching and learning.

A **third** projected emphasis will be on an accelerated encouragement of parental choice. This movement, long advocated by the Reagan Administration, received a huge boost from the National Governors' Association (1986). The position of the NGA reflects an apparent widespread perspective in the policy communities that public education is a failure and must be completely overhauled if this country is to maintain its economic position in the world. The concept of family choice options is also being increasingly argued from the perspective that public education remains one of the last bastions of monopoly in this country, a point stressed by former United States Secretary of Education's Terrell Bell in an April, 1986, speech at a gathering commemorating the third anniversary of *A Nation at Risk* (Shannon, 1986). What Bell was alluding to is the widely recognized commitment in this society to the values of the capitalistic, free enterprise system that has consistently held a high place in the American ethos (McClosky and Zaller, 1984).

Closely related, yet having a different emphasis, is the **fourth** projection that parental involvement will be either mandated or that important incentives will be provided that call for greater parental relations in the schools. The National Governors' Association is but one of the prominent advocacy groups supporting this initiative. The two state plans for the comprehensive restructuring of schools referred to earlier (Massachusetts and Washington) both require parent representation on local governing bodies that are to be given substantial autonomy in designing new governance arrangements.

The **fifth** projected theme of the next generation of reform concerns an issue largely ignored in the first round, the at-risk student. While there still does not appear to be a consensus definition of all of the categories of students who are at-risk of continuing to be unserved by the schools, most definitions include a focus on the growing number of minority students who have higher dropout rates and on other disadvantaged students. Credit for the renewed attention to the special needs of the disadvantaged must be given to the Committee for Economic Development (1985) and the Council of Chief State School Officers (1986).

A **sixth** projected emphasis of the next generation will call for the greater use of schools to assist in the growing national interest in the provision of adequate early childhood education and day-care services. One of those who argue this position is Yale University psychologist Edward Zigler, who is quoted in a recent article as suggesting that this move would not only help solve the problem of latchkey children but would simultaneously address other social problems caused by unsupervised children, such as the growing number of teenage pregnancies and the continuing problems of juvenile delinquency and drug use (Trotter, 1987).

The **seventh** projection relates to the continued efforts to enrich the instructional program of elementary/secondary education. This is anticipated to take the form of a continuation of the strengthening of science and mathematics, foreign language, and the use of technology, but will also be expanded to include disciplines not just ignored in the first round but, of more concern to many, placed at a decided disadvantage as a result of initiatives undertaken in the early to mid-1980s. The expansions of the instructional program that are likely concern a recommitment to the humanities, largely due to the advocacy of the National Endowment for the Humanities (1987), and geography, currently being championed by the National Geographic Society.

The **eighth** projected theme of the next round is that the states will increasingly be willing to assume authority over poorly performing school districts. The concept of state receivership, endorsed by the National Governors' Association in 1986, is now in

place in nine states. In a well publicized case this year, the New Jersey Commissioner of Education placed the Jersey City Public Schools in receivership, the first such action in the country (although, as is to be recognized, federal courts in the past have assumed authority over urban systems in some school desegregation cases).

Some doubt exists whether in a legal sense the notion of state receivership is needed, given the well established legal principles that have granted the states plenary authority to create, alter, or dissolve school districts (Alexander and Alexander, 1985; Edwards, 1971; Hamilton and Mort, 1941; Remmlein, 1953; Reutter and Hamilton, 1976). Nonetheless, it is predicted that the concept will spread to other states (in 1988, nine have enacted a form of receivership) and that the states will make extensive use of their "new" authority. This prediction is based in part on the belief that the concept has considerable political symbolism and can be held up as concrete evidence of both the determination and commitment of the state to improve the quality of elementary/secondary education. In addition, some of the expected opposition to this relatively extreme violation of the traditional concept of local control can be diffused if the state receivership idea is linked to parental choice, as William F. Buckley, Jr. (1988), a leading spokesperson for conservatism and a supporter of family choice, has suggested in a recent editorial.

The last two of the projected themes of the next generation of reform would represent fundamental structural changes in public elementary/secondary education. In many ways it is unfortunate that the term "structural change" has been popularly identified with the first theme cited here, the move for greater participation in decisionmaking by teachers and other school constituencies. Structural change seems to suggest basic refigurations in the organizational features of school districts. The last two projections—a push for the integration of community services, as well as the continued emphasis on the creation of larger administrative districts—both satisfy this working definition of efforts to affect the structure of education.

The concept of the integration of community services is clearly not a new idea (Committee for Economic Development, 1966; President's National Advisory Commission on Rural Poverty, 1967; Sundquist, 1969). However, it is felt that the policy community will revisit the concept, particularly its potential application in rural communities where the provision of basic community health, welfare, social, recreational, and library services has traditionally lagged behind the quantity, and perhaps the quality as well, of those found in metropolitan regions. As suggested previously, many rural governmental jurisdictions are likely to be even more pressed in the future to maintain, let alone improve, many community services. The potential economic and programming benefits of the integration of many services, particularly in the smaller rural communities, will be increasingly explored. In a relative sense, the rural school district represents the greatest resource availability of professional expertise and physical plant and equipment in many rural communities. It would seem logical that the financial and programming merits of expanding the mission of this rich resource—the rural school—to include many functions now assumed by other governmental agencies will be increasingly recognized.

This movement is also compatible with the growing realization of the interrelatedness of many of the problems of children and youth (e.g., teenage pregnancy, school dropout, poverty, drug abuse, and delinquency) and that the governmental structures to deal with these are frequently fragmented and lack cohesiveness (Edelman, 1988).

The second of the two projected structural changes, and the last of the ten selected for inclusion in this overview, relates to the continuation of moves to create larger administrative districts in the state systems of elementary/secondary education through the encouragement or forced merger of small

enrollment size districts. The process of school district reorganization has been the single policy option used in many states throughout the 20th century to improve rural districts, despite a mixed research literature concerning its value and despite the political turmoil that it ordinarily generates. Nonetheless, it is predicted that a renewed effort will be made to effect rural school district reorganization as the full implications of a number of the economic, social, and political changes underway in the nonmetropolitan regions of the nation become clearer.

Projected consequences for rural schools. Some, probably a majority, of the ten projected themes of the next generation of school reform are likely to disproportionately add to the burdens of rural schools. Others, however, promise to result in rural districts being the "big winners"; correctly so this time, unlike Forbes' (1985) overly optimistic midterm assessment of the consequences for rural systems of the "first wave."

Use will be made in this exercise of the commonly acknowledged strengths and weaknesses of rural districts. These are shown in Table 22. These themes will serve as admittedly rough criteria to project the potential implications of the next wave. A three-point scale will be used in order to discriminate the degree of significance of each projected trend for the commonly expressed strengths and weaknesses (highly significant hypothesized positive or negative effect, moderately significant hypothesized positive or negative effect, and little or none hypothesized effect).

What the exercise represents, then, is a form of forecasting that is essentially an intuitive method and, thus, suffers from well recognized limitations of efforts of this type (e.g., the heavy reliance on subjective judgment; argument from insight; analysis from a basis that is itself arguable, that is, "the commonly acknowledged strengths and weaknesses of rural schools"; and the use in part of retroductive logic) (Ayres, 1969; Cornish, 1977; Dunn, 1981; Harrison, 1976). Nonetheless, the approach does allow one to offer conjectures about the future state of phenomena. Dunn (1981) takes the position that, in the absence of empirical data, "intuitive forecasting techniques (that produce conjectures) are particularly useful and even necessary" (p. 195).

The major hypothesized effects of the ten projected themes of the next generation of reform on rural systems are established in Table 23. The hypothesized negative effects of the projected next generation of reform outnumber those viewed to have a positive effect, six and three, respectively. Nonetheless, the three developments judged to have a positive impact on rural districts are extremely important and, thus, these systems might well be the "big winners" of the next round, as suggested earlier. For example, should the restructuring movement allow local systems substantial autonomy to set priorities, then there should be a lessening of the heavy burdens imposed by the need to comply with the previously enacted "first wave" programming and staffing mandates. Moreover, the restructuring movement should substantially minimize the projected negative effects of two of the new themes (address the at-risk student and enrich the instructional program). And, finally, the restructuring movement should clearly complicate the design and implementation of still two other of the themes (enactment of state receivership and encouragement of district reorganization).

The restructuring movement is not the only potential cause for rejoicing among rural school interests should the profile of the next generation of reform presented here materialize. The projected expanded mission of the rural school resulting from an increased emphasis on early childhood education and child-care services and the integration of community services should facilitate improvements in programming and the acquisition of new resources. Most importantly, these developments should create additional justification and public support for maintaining the presence of the school in the rural community.

Table 22

Themes of Commonly Acknowledged Strengths and Weaknesses of Rural Districts

Commonly Acknowledged Strengths	Commonly Acknowledged Weaknesses
Small class sizes	Lack of breadth and depth in the instructional program
Greater individual attention	Lower student performance
Low dropout rates	Inadequate instructional support system
Safe, orderly environment	Inadequate management support system
Development of student leadership qualities	Inadequate enrollment size
Strong faculty identity and commitment to the school	Recruitment and retention of staff
Strong parental interest in the schools	Inadequate financial resources
Strong community support	

Table 23

Major Hypothesized Effects of Next Generation of Reform on Rural Systems

Theme of Next Generation of Reform	Major Hypothesized Effect
1. Promote restructured schools	A highly significant positive effect; could free rural systems from burdensome state mandates that will likely be costly to implement or not possible to do so because of limited enrollment and/or difficulty of securing staff
2. Improve quality of teaching and conditions of the work-place	A highly significant negative effect; could make more difficult the recruit-ment of staff
3. Encourage parental choice	A highly significant negative effect if cross-district movement permitted, could further weaken enrollment base
4. Encourage parental involvement	Of little significance for rural systems
5. Address at-risk student	A significant negative effect; could add programming, staffing, and resource demands
6. Provide early childhood education and day-care services	A highly significant positive effect; could expand mission and strengthen community support and add resources
7. Enrich instructional program	A significant negative effect; could add programming, staffing, and resource demands
8. Enact state receivership	A highly significant negative effect; could cause disruptions and stress in rural community
9. Integrated community services	A highly significant positive effect; will expand mission and strengthen community support, enrich program, provide better services to students, and add resources
10. Encourage district reorgani-zation	A highly significant negative effect; will cause disruption in school and community and hinder planning

SECTION FIVE: SUMMARY OF MAJOR TRENDS, DISCUSSION, AND CONCLUDING COMMENTS

Summary of Major Trends

The intent of this statement was to establish the nature of the trends that are reshaping rural America, and, it follows, will change education in a rural setting, perhaps in irreversible ways. These new developments are of profound significance for those who seek to structure public policy for rural education, as well as for those organizations having a mission to improve the quality of education for the children and youth attending rural school systems. In this exercise, the patterns that were described were grouped into two broad categories: economic, social, and political trends; and educational developments resulting from the popularly labelled "first round" of school reform and those championed as the centerpieces of the next generation of school improvement efforts.

Major economic, social, and political trends. Fifteen major economic, social, and political patterns, many of them interrelated, that are viewed to be critical for understanding the changing context of education in a rural setting are outlined here. Some of these are cyclical in nature, whereas others are more long-term. Moreover, not all of the 15 are peculiar to nonmetropolitan regions of the nation, but are affecting urban areas as well. However, even in the instances of this type, the patterns highlighted in this statement have a unique significance for rural regions.

The accelerated interdependency of the economy of this nation with other nations is one of the most important changes. United States industries that export or compete against imports, such as the traditional nonmetropolitan activities of agriculture and energy production, have in recent years been at a competitive disadvantage in world trade. Moreover, lower foreign production costs in labor-intensive manufacturing have weakened the promising industrial redevelopment activities in many rural regions of the country, particularly in the South. These recent developments have added further complications to the viability of the rural economy caused by the long-term, continuous shift in the United States economy from goods-producing industries to service industries.

The nonmetropolitan unemployment rate since the 1979 recession rose more rapidly and has remained at a higher level than the metropolitan rate during this decade. Moreover, the unprecedented and largely unforeseen "rural population turnaround" of the 1970s has not extended into the 1980s. Indeed, net outmigration from nonmetropolitan to metropolitan areas has accelerated in recent years (reaching 632,000 between 1985 and 1986). Approximately one-third (853) of the 2,383 nonmetropolitan counties lost population in the first five years of this decade. The outmigration of the population, formerly concentrated in the Plains and Western Corn Belt, has now spread to other regions of the nation as well. Moreover, the population of nonmetropolitan areas continues to be older than that found in metropolitan areas that continue to gain labor force age immigrants from nonmetropolitan regions.

The traditional gap in per capita personal income of rural areas grew substantially between 1979 and 1984, with the greatest discrepancies occurring in the traditional nonmetropolitan county groups of agriculture, mining, and manufacturing. Closely related, nonmetropolitan areas continue to have a disproportionate number of the poor. While rural poverty continues to be concentrated in the South, other rural areas experiencing economic difficulties, especially those dependent on agriculture, energy and mining,

have a greater number living below current poverty standards.

Nonmetropolitan areas continue to lag behind metropolitan regions on a number of human resources characteristics viewed by most as important considerations in economic development (e.g., the average education of the population in terms of years of school completed, the percentage of the population that completed four or more years of college, the high school dropout rate, and access to postsecondary education and training opportunities). Additionally, the long-term pattern of the outmigration of rural youth, that slowed but did not cease during the 1970s, continues to place rural areas at a disadvantage in the proportion of the population in the traditional labor force age category.

The continuing fiscal crisis in the farm dependent counties for much of the past decade has placed many farmers in financial difficulty that causes them to leave farming. Many of these tend to be young, well educated farmers who operate commercial-scale farms. The human consequences of the fiscal difficulties in agriculture, important as they are, are not the only effects on the prolonged crisis. Rural, local governments, dependent as they are on property tax revenues, are feeling the effects as well. The huge declines in the value of agricultural land in recent years have occurred at approximately the same time that the federal government reduced or withdrew the funding of many grants-in-aid, block grant programs, and Federal Revenue Sharing. These changes have added greatly to the fiscal pressures facing rural governmental jurisdictions in the provision of public services and the maintenance and improvement of public facilities. Moreover, the ability of rural interest groups to mount successful political action programs to address their needs at the state and federal levels would appear to be handicapped not only as a result of previous reapportionments, but also in the anticipated realignments that will follow the census of population in 1990 and 2000.

A number of observers conclude that, for the present, rural households continue to follow more traditional family structures. However, since differences in rural-urban social values have lessened in recent decades, potential modifications in the household structure of rural residents are likely. Changes in the family structure of rural residents will increase the need for expanded public services in rural regions.

Major educational developments. The school reform movement underway in this nation for much of the decade represents another critical dimension of the changing context of education in a rural setting. The full effects on rural systems of the largely state-mandated "first wave" of reform that swept the country after 1983 are generally unknown. Several earlier speculative pieces on this matter generally concur that a number of the traditional problems facing rural systems (e.g., difficulty in recruitment and retention of staff, and limited financial resources) are likely to be exacerbated as a result of the major emphases of the first years of the reform movement. These major emphases include strategies that are intended to effect improvements in: the quality of teaching and the instructional program, the quality of school personnel, the monitoring of school systems, competition in public education, and the structure of the state system of elementary/secondary education. Moreover, the thrusts of a number of the new emphases are likely to cloud rural school district long-range planning efforts. The tentative conclusions of the one known multistate effort to examine the consequences of the "first wave" of the reform movement on rural systems tend to confirm these earlier speculations.

The nation's rural, small school systems are likely to be the "big winners" in the next generation of reform if the projected direction of the next round presented here holds. The concept of the restructuring of schools, one of the new emphases, should permit rural schools to argue for a lessening of state-imposed

programming requirements in order to implement more meaningful local priorities. Two other new emphases, the use of the rural school in an expansion of early childhood education and day-care services and the anticipated prominence of the rural school in the integration of rural community services, should result in improvements in programming and fiscal resources and, most critically, should add important justification for the continuation of the presence of the school in the rural community.

Discussion

It is apparent that the vast and diverse nonmetropolitan regions of this nation are under considerable stress. The convergence of economic, social, political, and educational developments in rural America present the policy and school improvement communities with an unprecedented set of problems that will compound efforts to design and implement meaningful, long-term strategies for the improvement of education in a rural setting.

As intractable as many of these issues appear to be, it is also clear that solutions must be sought and immediate progress made toward their resolution. The presence of still large numbers of residents who by choice or necessity continue to live in nonmetropolitan regions, the continued existence of a significant educational enterprise in the rural areas of the country, and the deeply held American commitment to equality for all citizens requires no less. Moreover, there should be little doubt that how well the policy and school improvement communities respond to the unfolding perplexities of the issues facing rural school districts is of consequence not only for rural areas, but equally so for the future economic, social, and political well-being of the entire nation.

It is also evident that the policy and school improvement communities cannot be timid nor can they hesitate or vacillate too long in pondering the implications of the trends outlined here. To facilitate what must ultimately be a largely state specific discussion of implications, a number of core considerations are offered here. These have widespread utility as a framework for the discussion of needed new, comprehensive, integrated, and cohesive policies and programs for rural school improvement efforts in this era of transition and contraction in rural America that may extend well into the future.

The core considerations are nine in number. They center on the need for:

- different policies and program strategies,
- comprehensive state education agency planning,
- the related need for joint planning with other public service providers,
- increasing collaboration among educational systems,
- planning a more effective state school system structure,
- strengthening fiscal support and programming and staffing practices,
- increasing research and development on rural education,
- an emphasis on capacity building, and
- capitalizing on strengths of rural schools.

Different policies and program strategies. One of the most revealing insights this profile of the major economic, social, and political trends provides is the nature of the diversity to be found in nonmetropolitan regions of this nation. In their excellent synthesis reported on extensively here, Brown and Deavers (1987) state that not only must future public policy for the economic revitalization of rural America recognize that the current issues facing nonmetropolitan regions are unlike previous times, but that:

Rural America is extremely di-

verse, and broad generalizations mask many important differences among individual areas. In fact, in many ways the variation among rural areas is often as great as the differences between them and urban areas (pp. 1-12).

Daryl Hobbs (1983), a rural sociologist at the University of Missouri, who over the years has done exemplary work in rural elementary/secondary and postsecondary education, provides still another perspective on this issue:

> ...Rural communities and regions tend to reflect their individual natural environments and resources. Rural communities vary widely across the country, frequently deriving their distinctive characters from the prominence of a single local industry. There are rural farming, fishing, mining, ranching, and resort communities. There are river towns, desert towns, and bedroom towns. Some rural communities are racially mixed, while others are ethnic enclaves. Some have a dominant religion, while others have no particular unifying heritage or institution. In short, rural America exemplifies the diversity of the national culture (pp. 14-15).

Because a rural school reflects the community it serves, it follows that rural school districts are as different in many important ways one from another as they are different from urban and suburban systems, as many observers have cautioned (Croft, 1986; DeYoung, 1987; Gjelten, 1982; Nachtigal, 1982; Sher, 1977).

Public policy for rural schools must acknowledge that being rural does not mean being homogenized. However, policy must also reflect the powerful arguments advanced by Nachtigal (1982), Sher (1977), and Tyack (1974) that the continued use of the "one best way" mentality (the urban school model!) in the shaping of state and federal policies for school improvement is detrimental to the success of rural schools because it ignores important peculiarities of systems of this type.

The policy implications of the pronounced differences in rural school systems and the communities of which they are inevitably linked seems axiomatic. That is, rural school improvement initiatives must be diverse and must reflect the different values and socioeconomic characteristics of the rural communities they serve. Nachtigal's (1982) work, in particular, provides a number of valuable guidelines for the design and implementation of rural school improvement efforts, as does the excellent recent synthesis and think piece on the generic issues of the school improvement quandary provided by Crandell, Eiseman, and Louis (1986).

Comprehensive state education agency planning. The unfolding socioeconomic changes in rural America that promise to alter, perhaps in irreversible ways, the context of education in a rural setting places a premium on strategic planning by not only local officials, but especially state offices as well. The prime responsibility for the development of strategic plans for the state system of elementary/secondary education rests, of course, with the state. Each state has the primary responsibility to implement the universally acknowledged constitutional requirement for the provision of a system of public schooling for the elementary/secondary school-age population. The precarious situation faced by many rural schools, found in large numbers in virtually all state school systems, adds urgency to not only the development of strategic plans for the state system, but the tailoring of much of the planning to give special attention to the rural school sector of the state system of schools. This emphasis makes good planning sense not only for humanitarian reasons, as important as they are, but pragmatic ones as well. That is, the success of many state-initiated school improvement efforts will be largely dependent on an awareness and accommodation of the strengths and weaknesses of the rural school component of the state school system. Only

good, solid, and continuous strategic planning can provide this requisite information.

The essential features of strategic planning are widely acknowledged (e.g., conducting critical analysis; establishing mission and goals statements; defining planning assumptions; developing program strategies, operational plans, and action plans; and establishing performance standards) (Grant and King, 1982; Lewis, 1983; Paine and Anderson, 1983; Steiner, 1979). One useful way to tailor the conventional features of strategic planning exercises to reflect the rural school sector is to incorporate a specific "rural school impact" statement much like the growing use of "fiscal impact" and "environmental impact" statements now in many local, state, and federal legislations. This would help assure that the special problems of rural schools are considered.

Joint planning with other public service providers. The population trends and the financial stress being experienced in many rural regions, especially in the traditional nonmetropolitan counties of agriculture, mining, and energy production, suggest that the policy communities will be further handicapped in efforts to bridge the traditional gap in rural public services. Moreover, the changing demographics and behavioral patterns of the elementary/secondary school-age population (e.g., children living in poverty, teenage childbearing, school dropouts, crime, drug abuse, suicide, and other problem behaviors of adolescents), while probably not as consequential in rural areas as in metropolitan regions, at least for the present, are nonetheless significant enough to place added burdens on many already hard-pressed rural, local governments.

The implication of these developments seems clear: a need exists for closer linkages between school district governments and general governments at the local and state levels. In rural communities, the benefits of the complete integration of many health, welfare, and education services should also be explored. The merit of closer cooperation between education and other public service providers is not a new idea (Bailey, 1964; Graves, 1964; Stephens, 1966). However, to the traditional arguments of greater fiscal accountability, revenue enhancement, expenditure reduction, and improved horizontal and vertical planning and communication should be added another compelling rationale. That is, the future welfare of this society is dependent on how well the public school, including the still large number of rural systems, serves the increasingly divergent population of children and youth who will be in attendance. The public schools' success in this effort will, to a great extent, be determined by their ability to forge new alliances with other providers of services to children and youth.

The ability of the schools, when acting alone, to respond to the changing conditions over which they have little or no control is greatly limited. A much broader policy response that would consider all of the conditions of children and youth, as well as the relationship these conditions have on schooling, is required. Moreover, if more effective state and local policies and service delivery systems are to be realized, new relationships must be forthcoming between the schools and other instrumentalities of government, as well as with agencies in the private sector.

Increasing collaboration among educational systems. The recent loss of population and the financial difficulties of many rural regions will also complicate efforts to close the education and training gap that currently exists in much of rural America. These developments are especially troubling because they come at a time when the need for diversification of many rural economies is so urgent.

The policy implications of these developments are unmistakable. Ways must be found to begin to concentrate and target the limited resources (e.g., students, finances, personnel, and facilities) of individual rural systems so that the necessary critical mass of

these prerequisites of high quality education and training can be realized. Short of mandating the reorganization of rural school systems into larger administrative units, a policy implication to be discussed subsequently, the next most obvious alternative is to promote increasing collaboration among rural systems and between rural schools and postsecondary institutions.

A consensus exists on many of the factors that cause an organization to seek out or be receptive to relations with another organization: when the organization is faced with a situation of resource scarcity or other perceived need; when the leadership perceives the benefits to outweigh the costs; when the organization has a common mission and perceives that attainment of its goals is more likely realized through interorganizational arrangements than by acting alone; when there is a history of good relations, a positive view of the other, and both are in close geographic proximity; when the organization can maintain its identity and the members can maintain their prestige and authority; and when the organization has few or no other alternatives (Milford and Rogers, 1982; Northwest Regional Educational Laboratory, 1980; Schermerhorn, 1975; Stephens, 1979; Warren, 1967).

A recent piece (Stephens, 1988) offered an additional proposition on the conditions that seem to promote interorganizational arrangements in elementary/secondary education that applies equally well to efforts to forge needed new relations between basic education and postsecondary education:

> The successful implementation of widespread interorganizational arrangements is dependent upon a strategy of using state-induced external incentives to motivate local decisionmakers to seek out or be receptive to such efforts (p. 23).

State-induced incentives can take several forms. At a minimum, the pronouncement of a state policy commitment to promote interdistrict relations is required. So, too, is the development and use of state-sponsored planning guidelines that would establish a clear rationale for the functional areas that lend themselves to sharing. These guidelines should also include a statement of criteria on the preferred interdistrict organizational configurations. Another prerequisite is the provision of financial incentives to promote interdistrict relations. Concurrently, monies in the state aid program should be denied districts that persist in unilaterally expending state monies for programs in areas previously established as those lending themselves best to a form of interdistrict or interorganizational arrangement (pp. 23-24).

Planning a more effective state school system structure. Massive school district reorganization should not be used as the sole policy response to the needs of rural systems and as a way to improve the workings of a state system of elementary/secondary education. In the past, large-scale reorganization effects tended to be driven by a flawed research literature on the costs and benefits of rural school district reorganization. It was generally acknowledged even by its severest critics that district reorganization that made good educational sense should be promoted.

The new realities of much of rural America places a premium on the redefinition of "what makes good educational sense." There can be little doubt that the consequences of the long-term population losses and financial stress in many of the traditional nonmetropolitan agricultural areas of the midwestern states, most of them with large numbers of small enrollment size rural systems, have changed the context of the state's consideration of this policy option for improving the structure of the state system of schools. Similarly, other states whose large nonmetropolitan regions are currently suffering economic difficulties need to continually assess whether or not the current downturns are cyclical or more fundamental in nature. State and local decisionmakers

face a number of vexing issues here. It seems clear that not all rural systems will win and that there will be some losers in this period of transition and contraction.

Thus far, the focus in this discussion has been on the need to rethink the consequences of a weakening rural school component of the state system of elementary/secondary education. But there are other aspects of the structure of the system in need of re-examination as well. It is clear that the economic difficulties of nonmetropolitan regions not only have consequences for local jurisdictions (e.g., rural school systems, and rural, local governments), but state agencies as well. Thus, another policy implication is that state education agencies take the lead in an assessment of how best to provide needed delivery systems for educational services in the state system. It is assumed that an assessment of this type would include an examination of the quality and quantity of existing delivery modes, many of which appear to have proliferated in the past or make little economic sense today given the new realities of rural America. Moreover, it is further assumed that the state education agency would engage other state agencies having responsibilities for the provision of services to children and youth in this assessment, as called for elsewhere in this discussion. One of the criteria that should be weighted heavily in both of these aspects of the assessment ought to be how best to concentrate and target limited resources to assist rural systems and rural communities in the provision of needed services for children and youth.
End of transmission

Strengthening financial, programming, and staffing practices. It is axiomatic that a number of the traditional difficulties of many rural school systems (e.g., lack of breadth and depth in the instructional program, inadequate instructional and management support systems, difficulties in the recruitment and retention of staff, and inadequate financial resources) will be exacerbated by the economic, social, political, and, it would seem, many educational developments, that are impacting rural America.

A number of the other policy implications discussed in this section are directed in part at these concerns and should result in the consideration of ways to enrich the financial, programming, and staffing practices of rural schools (e.g., the call for comprehensive state education agency planning and the related need for joint planning with other public service providers). One of the overriding goals of each of these themes is the creation of a critical mass of requisite resources (e.g., students, finances, personnel, and facilities) for high quality programming in rural regions.

One of the implications of the new realities facing rural systems is that the policy communities in states that have not heretofore done so need to examine the ways that other states have attempted to achieve this overriding goal. For example, a number of states have addressed the financial difficulties of rural systems through the use of: "over-burden" factors in state aid allocation schemes that acknowledge higher per-pupil costs related to small size, geographic location, or other extenuating conditions beyond the reasonable control of a rural district; the development of more meaningful measures of school district wealth and effort, and the relationship between these factors in the design of state aid formulas; and a greater commitment to follow any new state mandates with corresponding resources needed by the district to implement new requirements.

Some states have attempted to expand and enrich the instructional and management support systems of rural districts by promoting the establishment of new delivery systems, such as: various types of educational service agencies to provide services to a cluster of rural systems in the areas of exceptional children, curriculum consultant services, media services, and the full range of management support services; the creation of regional secondary

vocational/technical schools to serve clusters of rural systems or by the shifting of many advanced programs in this area to a regional community college; and the use of telecommunications to provide advanced instructional programs to rural schools.

The chronic problems of staffing rural systems have been addressed by some states that have encouraged colleges and universities to provide specialized training for rural teachers in their teacher preparation programs, interdistrict sharing of highly specialized staff, and the greater use of joint appointments with content specialists on the faculty of postsecondary institutions (Stephens and Turner, 1988, pp. 76-78).

Increasing research and development on rural education. The existing meager and largely nonadditive research literature on rural education has been commented on by many, most recently by Alan DeYoung (1987) in his excellent synthesis of the status of rural education research. As unacceptable as the current situation is, it becomes even more so in light of the changing context of education in a rural setting outlined here. The absence of a comprehensive research literature to inform the policy and school improvement communities will hamper the policy and planning process in a number of important ways, most noticeably by possibly contributing to the deadliest of all policy errors, defining a problem incorrectly.

The policy implications are also clear here. That is, how can a mechanism be put into place that would not only serve to help identify the substantive areas of research needed by the policy and school communities, but also provide both the legitimacy and resources to carry out the policy agenda once identified? Such an undertaking is probably not reasonable, or even necessary, on an individual state basis and might best be implemented on a regional multistate basis.

Emphasis on capacity building. Expanding the capacity of rural school district officials so that they can better define the problems they will face and can engage in other necessary steps in arriving at solutions (e.g., identifying alternatives, selecting the best alternative, and implementing and evaluating planning decisions) also seems axiomatic.

However, the implications of the strategy to go with a plan that places responsibility on the individuals closest to the problem, and the ones who have the greatest stake in the resolution of the problem, raise a number of policy considerations. For example, who among the typically large number of technical assistance providers found in most areas should have primary responsibility for the provision of needed long-term training? What agencies should play a secondary role? How can the financing of the training be done so that a definite source of fiscal support is available?

Capitalize on strengths of rural schools. This final implication might well be most important of all. Many observers of rural education consistently cite a number of strengths that good rural systems regularly exhibit: small class sizes that facilitate individualized attention, low dropout rates, a safe orderly environment, development of student leadership qualities, strong faculty identity and commitment to the school, strong parental interest and involvement, and strong community support (Barker, 1985; Beckner, 1983; Jess, 1985; Nachtigal, 1982; Sher, 1977). In a discussion of the rapidity of changes impacting this society, Hobbs (1983) suggests four particular strengths of rural districts that might cause them to "become the educational trendsetters of the 1990s" (p. 25). The peculiar strengths that Hobbs sees in rural systems that together increase their capacity to adapt to change include: their history of seeking solutions to problems caused by scarce resources, their small size that facilitates flexibility, their diversity that facilitates experimentation with different options, and their close working relations with their communities that promote collaboration with minimal bureaucratic red

tape (pp. 1-2).

It is important to note that many of the strengths of rural systems are strikingly similar to a number of the characteristics of effective schools identified in recent years that have also served as, however roughly, the policy goals for much of the "first round" of reform and that are proposed as the centerpieces of the next generation of reform.

The implication for the policy communities of these similarities of strengths in rural systems and the research literature on effective schools is both clear and sobering. That is, how can policies be designed that will retain those features of good rural districts while simultaneously accommodating the inevitable adjustments that must be made in the rural school district component of the state system of education caused by the new realities of education in a rural setting? The reconciliation of these two competing needs will challenge the creativity of the policy communities as few other policy quandaries have in recent years.

Concluding Comments

This nation has been served well in the past by a strong, healthy system of rural school districts. However, it should be abundantly clear that the quality of many rural schools will suffer in the future as the results of the unprecedented conflux of both new and old pressures impacting the nonmetropolitan regions of the country become clearer.

These pressures will strain the creativity of local and state policy communities. What is required is a new commitment for the development of a long-term, comprehensive, integrated, and cohesive strategic policy for addressing the issues confronting rural systems, and, by extension, the state system of elementary/secondary education. The specific tactics of such a policy must, of course, vary. However, it is hoped that the core considerations of a meaningful policy response to the changes occurring in rural regions of the nation outlined here will serve as a useful beginning point for the formulation of the needed strategic plan.

While it may not be midnight in rural education as some observers have suggested, the issues facing rural schools appear to be so pervasive that the response of still others who hold the view that somehow with luck and pluck rural schools will make do through this period of transition is equally disconcerting. Neither position is warranted. Rather, what is required is a commitment to understand the new realities of education in a rural setting and a heavy dose of leadership and vision in the shaping of public policies that will serve well into the future.

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APPENDIX

Outline Maps of Nonmetro Counties

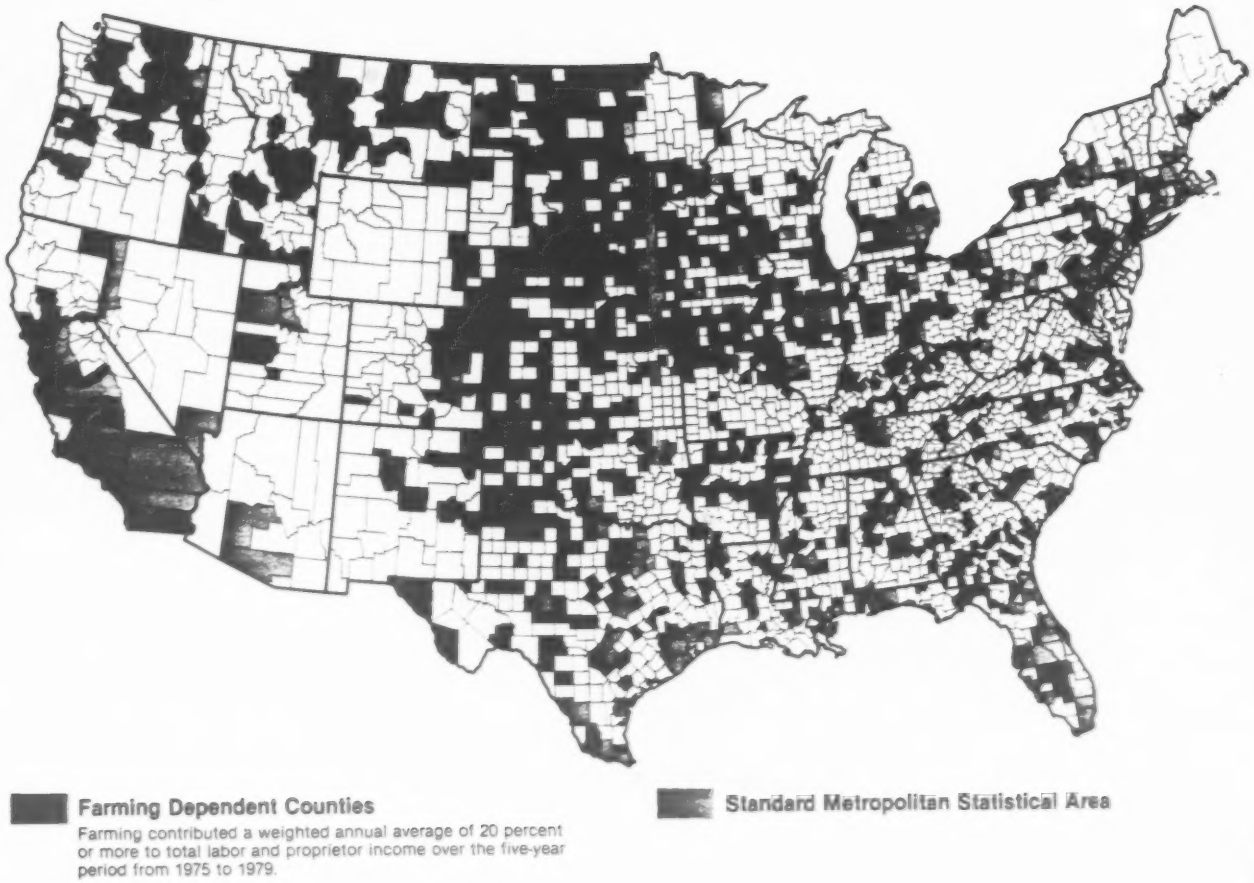

Farming Dependent Counties
Farming contributed a weighted annual average of 20 percent or more to total labor and proprietor income over the five-year period from 1975 to 1979.
Standard Metropolitan Statistical Area

Figure 1

Farming-Dependent Counties

Source:
Bender, L. D. (Ed.), Green, B. L., Hady, T. F., Kuehn, J. A., Nelson, M. K., Perkinson, L. B., & Ross, P. J. (1985). The diverse social and economic structure of nonmetropolitan America (p. 4). Rural Development Research Report No. 49. Washington, DC: Department of Agriculture, Economic Research Service.

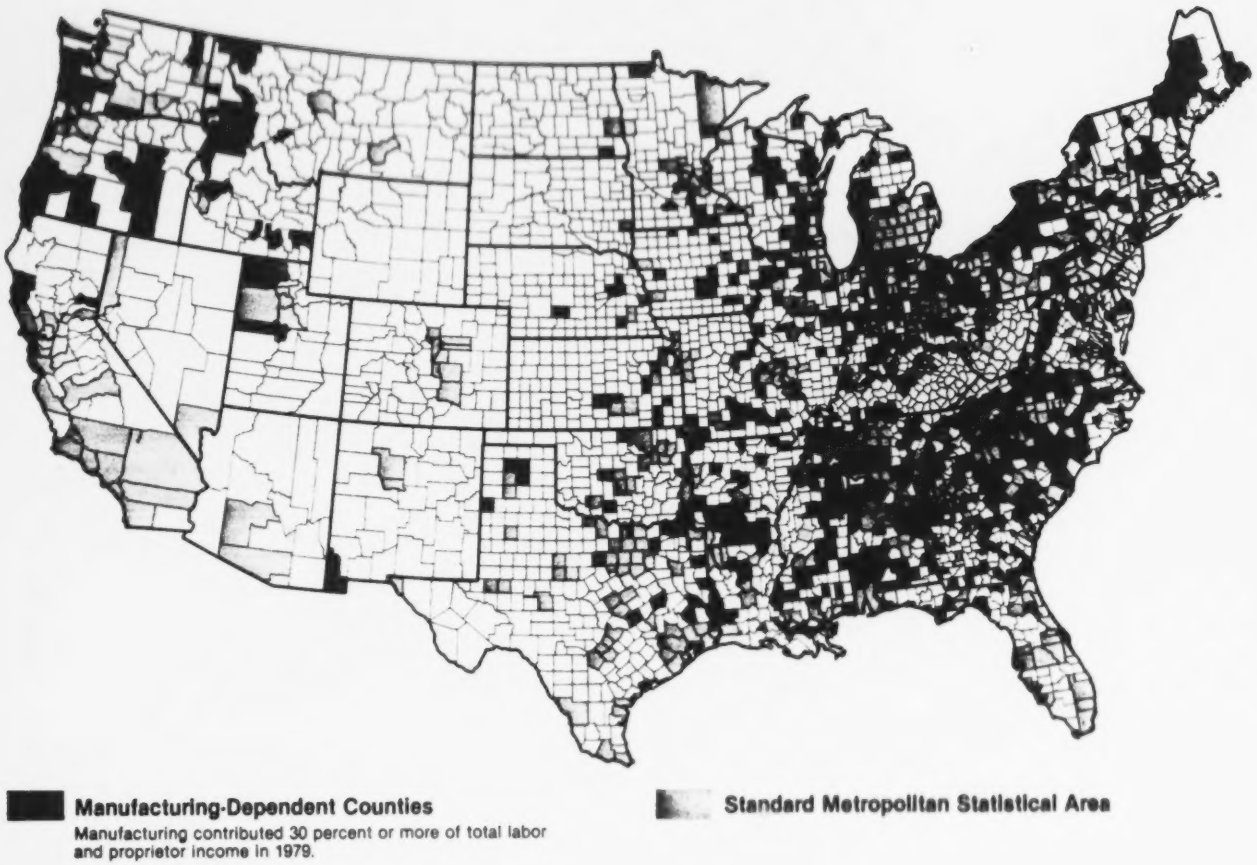

Manufacturing-Dependent Counties
Manufacturing contributed 30 percent or more of total labor and proprietor income in 1979.
Standard Metropolitan Statistical Area

Figure 2

Manufacturing-Dependent Counties

Source:
Bender, L. D. (Ed.), Green, B. L., Hady, T. F., Kuehn, J. A., Nelson, M. K., Perkinson, L. B., & Ross, P. J. (1985). The diverse social and economic structure of nonmetropolitan America (p. 7). Rural Development Research Report No. 49. Washington, DC: Department of Agriculture, Economic Research Service.

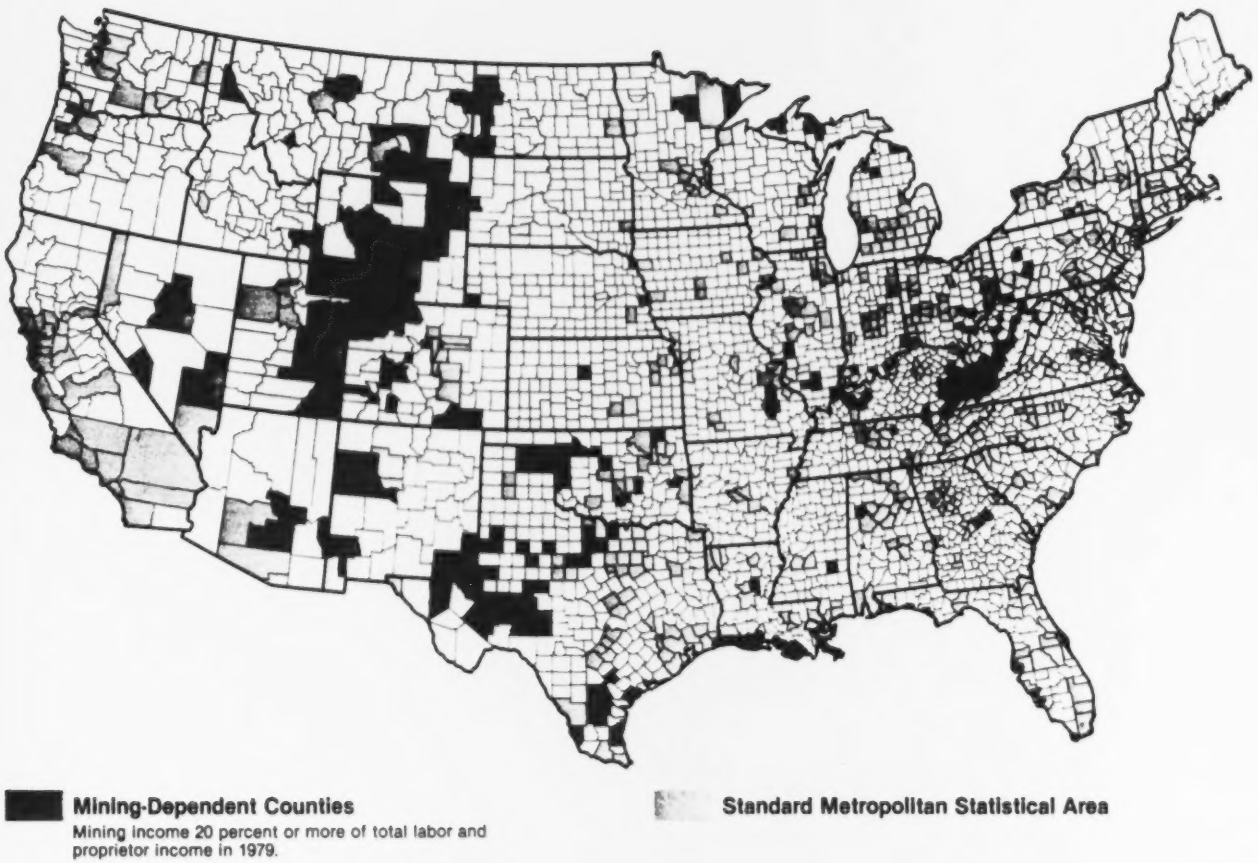
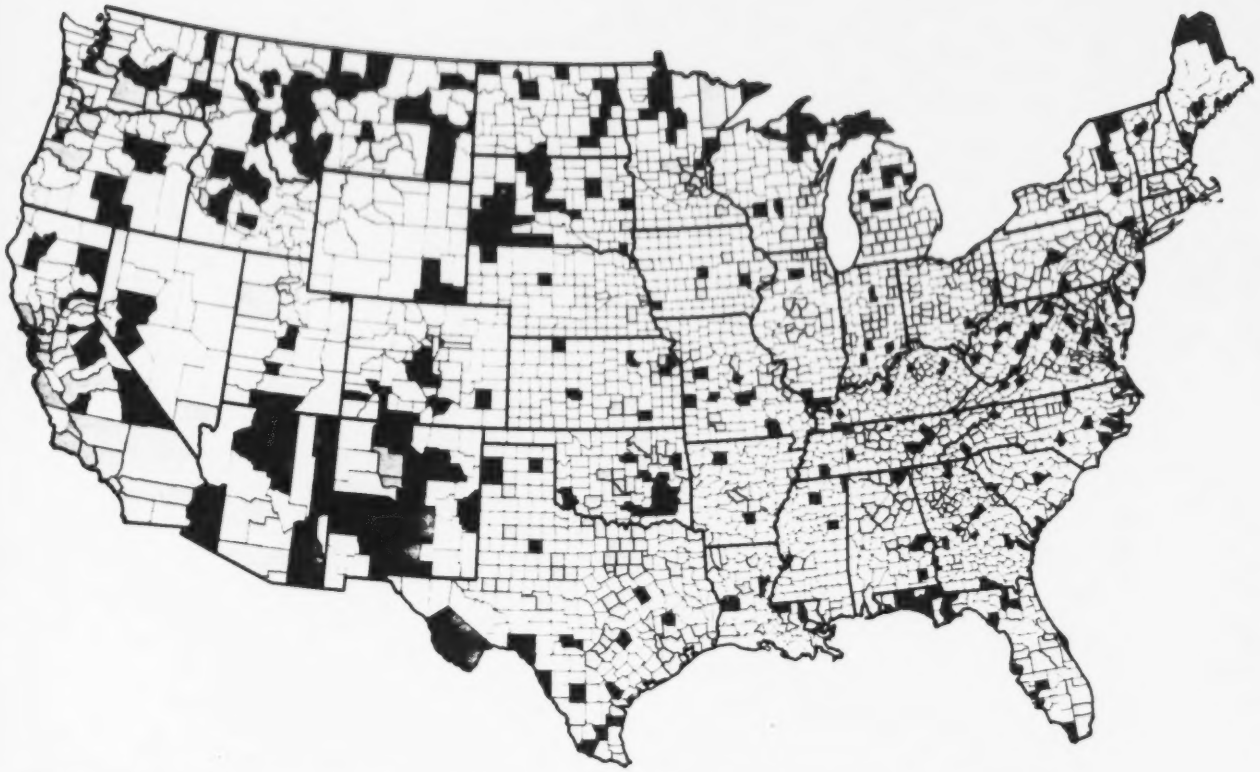

Mining-Dependent Counties
Mining income 20 percent or more of total labor and proprietor income in 1979.
Standard Metropolitan Statistical Area

Figure 3

Mining-Dependent Counties

Source:
Bender, L. D. (Ed.), Green, B. L., Hady, T. F., Kuehn, J. A., Nelson, M. K., Perkinson, L. B., & Ross, P. J. (1985). The diverse social and economic structure of nonmetropolitan America (p. 9). Rural Development Research Report No. 49. Washington, DC: Department of Agriculture, Economic Research Service.



Specialized Government Counties

Counties in which local, state and Federal government payrolls contributed 25 percent or more to total labor and proprietor income in 1979.

Standard Metropolitan Statistical Area

Figure 4

Specialized Government Counties

Source:

Bender, L. D. (Ed.), Green, B. L., Hady, T. F., Kuehn, J. A., Nelson, M. K., Perkinson, L. B., & Ross, P. J. (1985). The diverse social and economic structure of nonmetropolitan America (p. 11). Rural Development Research Report No. 49. Washington, DC: Department of Agriculture, Economic Research Service.

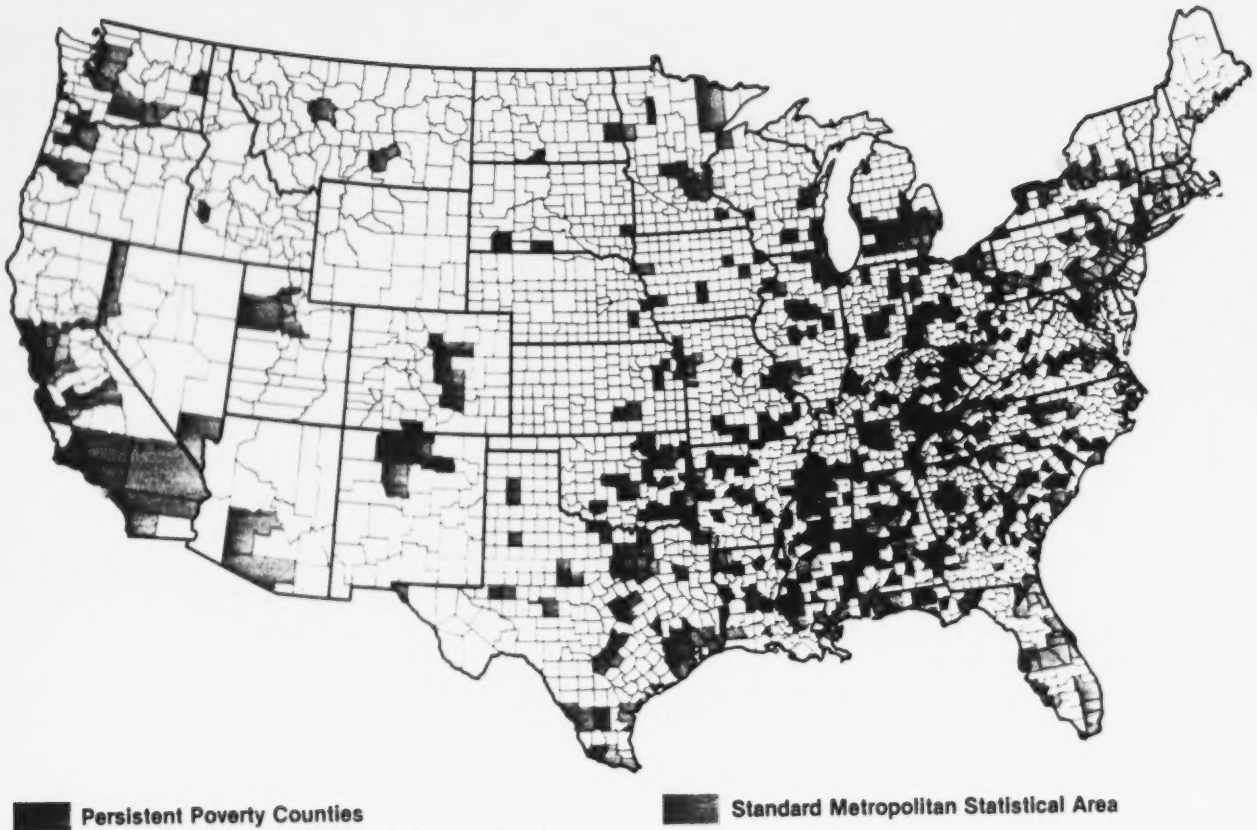

Persistent Poverty Counties
Counties ranking in the lowest per capita income quintile in 1950, 1959, 1969, and 1979.
Standard Metropolitan Statistical Area

Figure 5

Persistent Poverty Counties

Source:
Bender, L. D. (Ed.), Green, B. L., Hady, T. F., Kuehn, J. A., Nelson, M. K., Perkinson, L. B., & Ross, P. J. (1985). The diverse social and economic structure of nonmetropolitan America (p. 14). Rural Development Research Report No. 49. Washington, DC: Department of Agriculture, Economic Research Service.

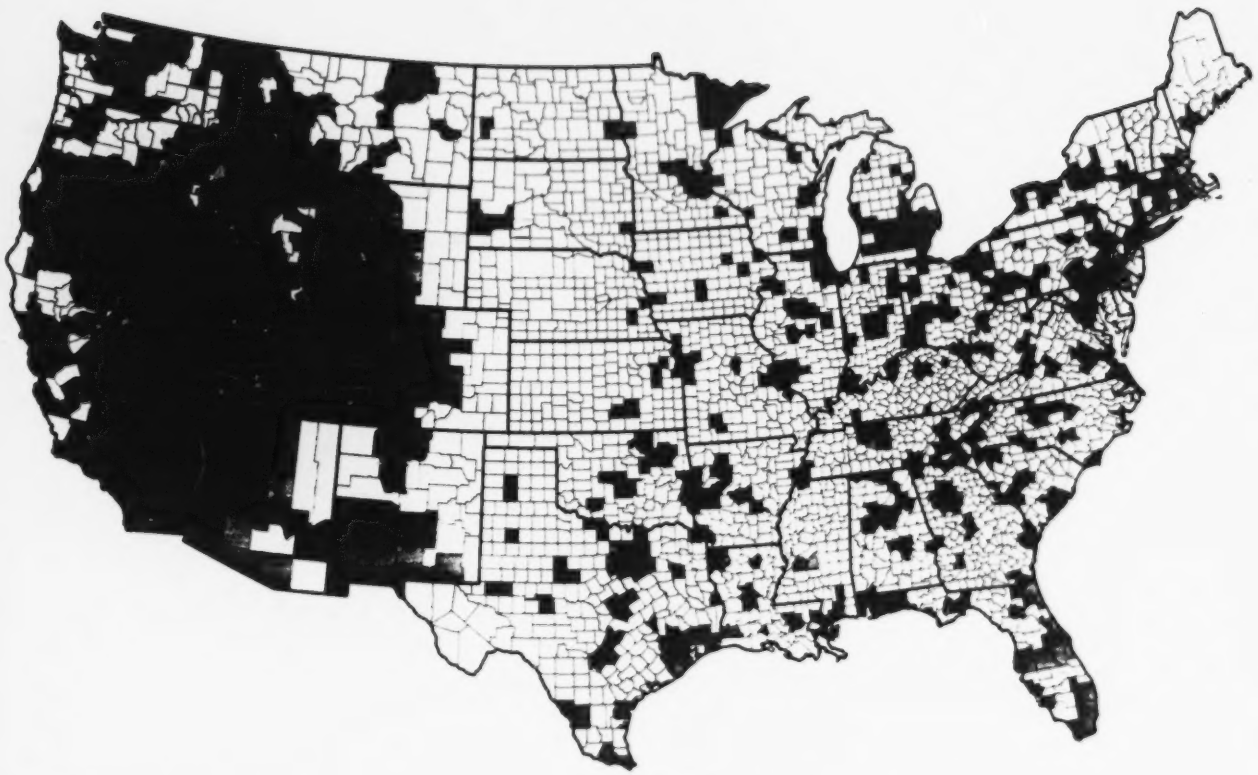

Federal Lands Counties
Counties in which Federal land is 33 percent or more of total land area.
Standard Metropolitan Statistical Area

Figure 6

Federal Lands Counties

Source:
Bender, L. D. (Ed.), Green, B. L., Hady, T. F., Kuehn, J. A., Nelson, M. K., Perkinson, L. B., & Ross, P. J. (1985). The diverse social and economic structure of nonmetropolitan America (p. 16). Rural Development Research Report No. 49. Washington, DC: Department of Agriculture, Economic Research Service.

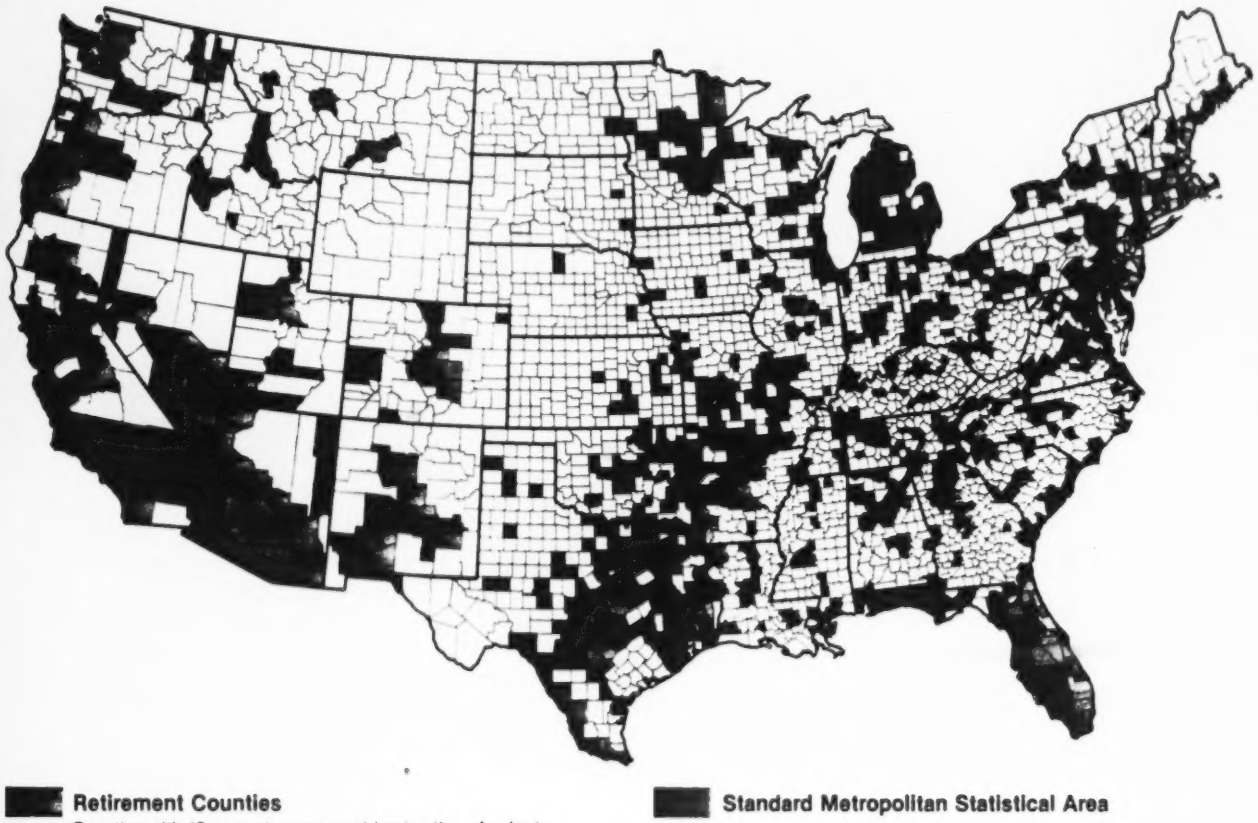

Retirement Counties
Counties with 15 percent or more net inmigration of cohorts age 60 and over from 1970 to 1980.
Standard Metropolitan Statistical Area

Figure 7

Retirement Counties

Source:
Bender, L. D. (Ed.), Green, B. L., Hady, T. F., Kuehn, J. A., Nelson, M. K., Perkinson, L. B., & Ross, P. J. (1985). The diverse social and economic structure of nonmetropolitan America (p. 19). Rural Development Research Report No. 49. Washington, DC: Department of Agriculture, Economic Research Service.

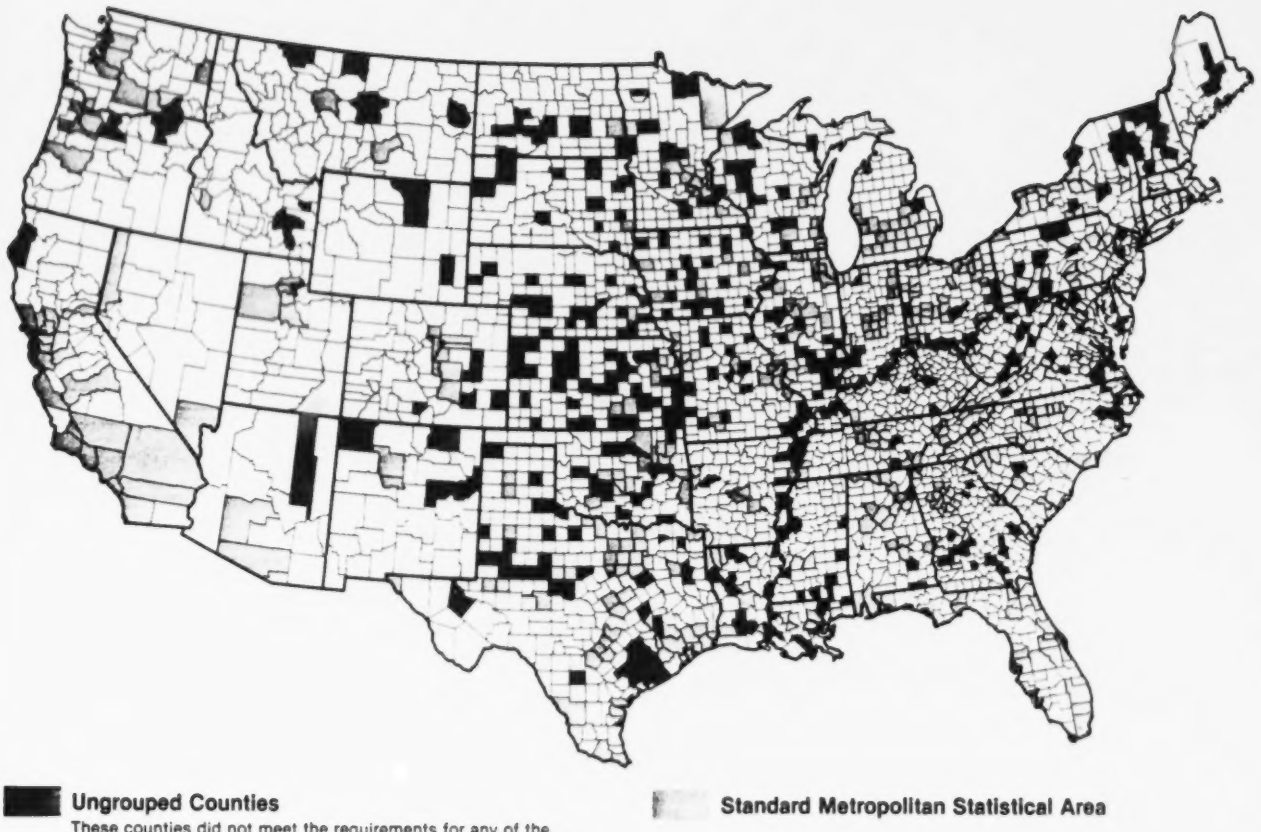

Ungrouped Counties
These counties did not meet the requirements for any of the other county groups.
Standard Metropolitan Statistical Area

Figure 8

Ungrouped Counties

Source:
Bender, L. D. (Ed.), Green, B. L., Hady, T. F., Kuehn, J. A., Nelson, M. K., Perkinson, L. B., & Ross, P. J. (1985). The diverse social and economic structure of nonmetropolitan America (p. 21). Rural Development Research Report No. 49. Washington, DC: Department of Agriculture, Economic Research Service.